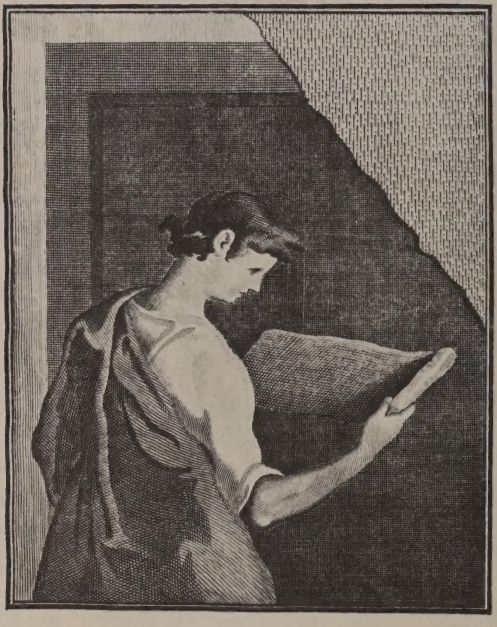

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THE MUSEUM JOURNAL

VOLUME XVI

THE UNIVERSITY MUSEUM
PHILADELPHIA
1925

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John Cadwalader, Esq.

THE
MUSEUM JOURNAL

VOL. XVI PHILADELPHIA, MARCH, 1925 No. 1

JOHN CADWALADER

MR. JOHN CADWALADER died on the evening of March 11, 1925, at his home at 1519 Locust Street within half an hour of his last attack of illness that seized him while attending a meeting at 240 South Fourth Street, the old family home in which he was born 82 years ago. To say that Mr. Cadwalader was one who represented the best traditional citizenship of Philadelphia is only to describe in very general terms a personality which, so long identified with the institutions of the City, assumed in fact the qualities and the effect of an Institution in itself. The passing of that personality means more than the closing of a career; it signalizes the ending of an era, the obsequies of an established order. It is well to take note of the fact for the like will not be seen again. The ideals and principles with which that order was informed, though they have proved so vulnerable, had the great advantage and the merit of sincerity and strength, qualities that were implicit in Mr. Cadwalader's character. His was a life of singular purity of purpose and a life that in its relation to society in general, to his friends and to humanity was typical of the breed to whom the name of gentleman was first applied. The name has not become obsolete, it has only changed its usage.

. . . . . .

At a meeting of the Board of Managers of the University Museum held on March 20, 1925, the President referred feelingly to Mr. Cadwalader's relation to the Museum Board, to the Community and to himself personally.

After announcing to the Board the death of their associate, Mr. John Cadwalader, who had been elected a member of the Museum Board Managers on May 20, 1910, the President referred to the long association of Mr. Cadwalader's family with the history of Phila-

delphia, and spoke at length upon his honour, his integrity and his fearlessness in expressing approval or disapproval of any subject which came before his colleagues for their consideration. The President stated that Mr. Cadawalader was absolutely unafraid and the example of his courage and fearlessness and of his unusual mastery of principles and of events made his loss an almost irreparable one.

Mr. Harrison then informed the Board of his long and unbroken friendship for Mr. Cadwalader who was in fact his nearest and best friend; the period of this friendship lasting over three score years and ten. During this long association, while naturally there were differences of opinion upon one question or another, there never had been a word of unkindly disagreement between them.

The Board unanimously adopted a resolution embodying these statements of the President, to be spread upon the Minutes of the Board in full, with instructions that a copy be sent to Mrs. Cadwalader.

SABIN W. COLTON, JR.

The death of Mr. Sabin W. Colton, Jr., which took place on January 29th, removes another familiar figure who had long been associated with the Museum's work. Mr. Colton was elected to the Board of Managers in 1914 and served with a high sense of his responsibility until the time of his death. At an earlier period he had been identified with one of the leading financial institutions of the City, an experience that came to his aid and contributed to his usefulness as a member of the Museum Board. Mr. Colton's advice was always modestly and cheerfully given when occasion called for it and he gave liberally of his own means in support of all the Museum's work. He was a genial and a friendly associate whose helpful influence will be sadly missed and whose loss will be lamented by all with whom he came in contact.

. . . . . .

At a meeting of the Board of Managers held on February 20th, it was resolved that the President be requested to communicate to Mr. Colton's family a sense of their deep regret and sympathy. The following letter was addressed to Mrs. Colton by the President.

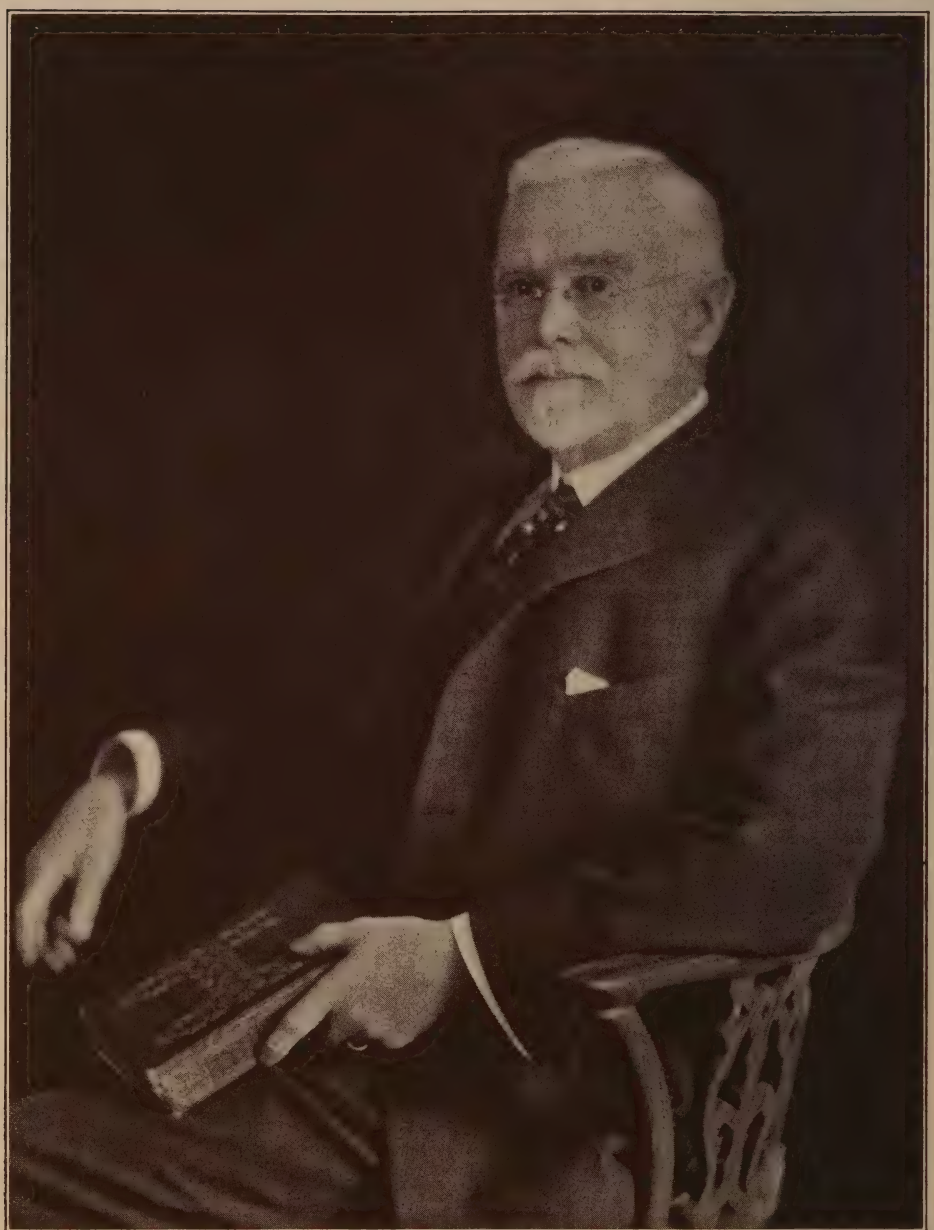
February 21, 1925.

My dear Mrs. Colton:

The Board of Managers of The University Museum, of which Mr. Colton was so valued a member, held their monthly meeting upon yesterday, February the 20th. I announced to the Board before the transaction of any business, the loss which we had all sustained since our last meeting by the death of Mr. Colton.

I tried to express as best I could from my long friendship with him the feelings which I felt, and which I know every member of the Board shared with me, that he was to be with us no more. All of us know how intelligent he was, how honourable he was, and in the many years of his association with us we had unusual proof of his great generosity, of his kindness and gentleness and of his readiness to help in case of need at any time.

We have not yet begun to think of his successor. His loss is too deeply felt by all of us. By a Resolution of the Board it was arranged that I, being President, should address this note to you which is intended not only for yourself but for the various members of Mr. Colton's family.



Sabin W. Colton, Jr., Esq.

It was also unanimously resolved that this note which it has fallen to my lot to write you, should be made a part of the Minutes of the meeting and should be copied in full upon the records of the proceedings of our meeting held, as I have said, on February the 20th.

With sincere respects, I beg to remain,

Faithfully yours,

CHARLES C. HARRISON,
President.

Mrs. S. W. Colton, Jr.
Bryn Mawr, Pennsylvania.

Charles Custis Harrison, LL.D.
President of the University Museum.
Recipient of the Philadelphia Award 1925.

DR. HARRISON AND THE PHILADELPHIA AWARD

Addresses Delivered at the Academy of Music at the Presentation on Wednesday Evening, March 25th

The Philadelphia Award was founded in 1921 by Mr. Edward W. Bok. The Award is conferred upon the man or woman living in Philadelphia, its suburbs or vicinity, who, in the judgment of the Board of Trustees of the Award, shall in the past year have performed or brought to its culmination an act or contributed a service calculated to advance the best and largest interests of Philadelphia.

THE HONORABLE GEORGE W. NORRIS

Ladies and Gentlemen:—The word "service" is one which is very much upon people's lips these days, but I sometimes wonder just how accurate a conception we have of its meaning. What I thought was a very admirable definition of it that I saw recently was this: "Service is labor baptized and anointed and consecrated to high ends." That definition is well typified in the design to be found upon one of the old Roman coins, of an ox standing between a plough and an altar, ready for labor or for sacrifice. It is service rendered in that spirit, no matter in what field, that the founder of the Philadelphia Award meant should be recognized and given a visible and public token of appreciation. And it is with an understanding of that spirit that we are assembled here tonight to witness the fourth annual presentation of the Award.

A year ago I found myself in an embarrassing position. Senator Pepper, the Chairman of the Board of Trustees of the Award, was unavoidably detained in Washington, and I had to apologize to you as best I could for his absence, and attempt the impossible task of substituting for him. Some wag remarked at the time that his absence in Washington was due to the fact that he was pouring water on the troubled oil. But this year both you and I are more fortunate. As the newspapers have already advised you, the Senate has confirmed an attorney general and has concluded its twenty-year deliberation upon the Isle of Pines Treaty, so it has adjourned and the Senator is with us. That being so, my only function is to open this meeting, to express the gratification of the Board of Governors and the members of the Philadelphia Forum in being allowed to participate in such an interesting occasion, and to ask the Senator to take his place as permanent chairman of the evening.

THE HONORABLE GEORGE WHARTON PEPPER

Mr. Chairman, Ladies and Gentlemen:—I think it is no disparagement to my colleagues in the Senate of the United States to say that upon my return to Philadelphia and in the presence of an audience like this, I feel that I am successfully breaking into the best society.

The founder of the Philadelphia Award had in mind not merely service as interpreted by Mr. Norris in his opening, but service rendered for this community and through this community to the Nation. And because the service is rendered to Philadelphia, our meeting is incomplete in the absence of the official head of the city who is, Mr. Chairman, detained in Harrisburg, where he is happily discharging the duty of taking part in the presentation to the people of the state of that venerable charter under which the liberties were guaranteed which we, the descendants of the fathers, have ever since enjoyed. We miss him, not merely because his official capacity requires that he should be with us, but we miss him because we are fortunate enough to have in the office of Mayor one who has himself rendered nation wide and notable service in the cause of promoting human happiness and welfare. In his absence, ladies and gentlemen, let us resolve ourselves into a committee of the whole and do some collective thinking respecting the significance of the award which is to be announced tonight. Our collective thinking is likely to be the happier and the more useful if we call upon somebody to direct our thinking and lead us along sane lines. I know no one who can do this better than the man who is himself the head of a great educational institution, the man who is engaged in shaping the educational policies of one of Philadelphia's greatest institutions, the University of Pennsylvania—a man who is the father of a great student body of fifteen thousand men and women. Suppose we call upon him to permit us to enroll ourselves for a time as part of his great student body, call upon him to interpret the Award for us and direct our thoughts along the lines the founder would fain have us follow.

I have great pleasure in presenting to this audience the President of the University of Pennsylvania, Dr. Josiah H. Penniman.

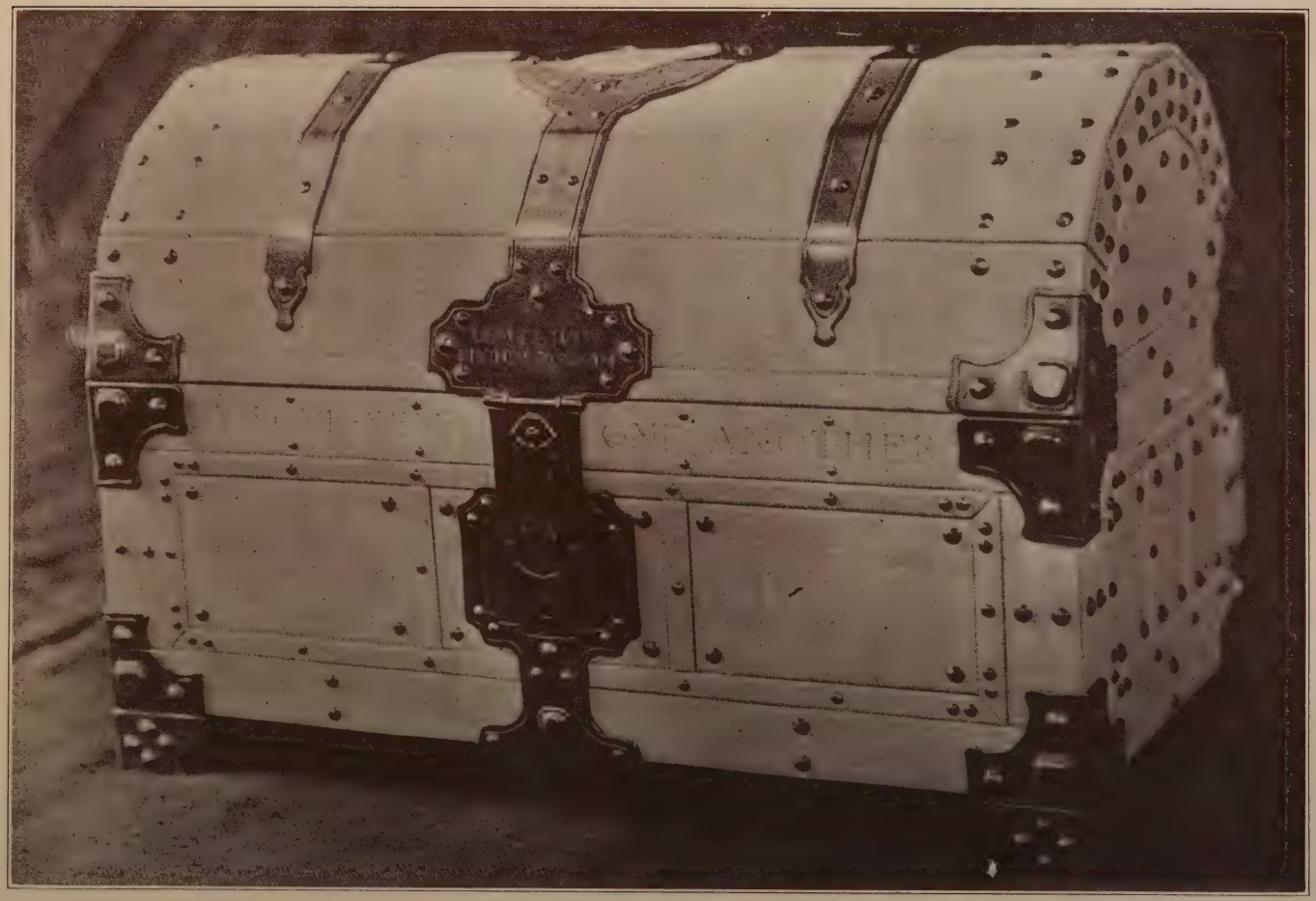
JOSIAH HARMAR PENNIMAN, LL.D.

Members and Governing Board of the Forum, Ladies and Gentlemen:—The Philadelphia Award, under whose auspices we have

met tonight, exists in two worlds—the world of the material, and the world of the spirit; the world of the real—actual, and the world of the ideal. It is in no sense a prize to be striven for, though its existence in this community is a constant reminder that the good of the people should actuate the lives of the citizens. The prize cannot be given to anyone who has worked for his own selfish interests. It is always given to one who has been characterized by his entire devotion to the service of others.

The greatest poets have all written of a better world that is to be. The people look forward to a time when existing evils shall have been done away. Youth looks forward, the present generation looks forward, all who believe in the immortality of the human soul look forward. The man who for whatever reason retires from business or from the practice of a profession looks forward, it may be and usually is to the enlarging of his own soul. It is never with the thought of spending his remaining years looking back over the path he has trodden, for there is always a pathway ahead that he must tread. No man with his faculties unimpaired derives pleasure except from the use of those faculties. No other view of philosophy of life, I believe, is worthy of the man or woman who has achieved nobly.

Failures in the past of either the nation, the community or the individual are warnings but they terrify none. The look is always forward, to the avoidance of errors of the past and to achievements greater than any hitherto accomplished. For the great examples of the works of men of long ago, we are profoundly thankful. They show what man has done, and what man has done man can do. The work of great geniuses and creative artists of the past have been vouchsafed to us as a precious heritage. We waste no time in worshiping the past simply because it is the past, although we wonder at the magnificence of the achievements of those who lived millenniums before our own day. It is the present moment that gives us our opportunities, and it is the use of the present moment that determines our future. It is the example of the achievement of the great ones of the earth who utilized what were to them their present moments that has given us our view of the greatness of life itself. Those who have created for us in stone as buildings or statues or monuments of whatever kind have enriched our lives, but the building or the statue, material though it may seem, is after all only an idea in a mind which through marvelous artistic skill has become



The Ivory and Gold Casket of the Philadelphia Award.

immortalized in marble. The great pictures of the past are likewise ideas, conceptions which first existed in the mind and soul of the artist and had no object in existence at all. Great pictures by the aid of skill, by the aid of the pigment and the canvas, have become immortalized and the idea of the artist goes marching down through the centuries through his works that have come to us.

The great books of the world are but the embodiment in language of thoughts of men by which they were inspired and through their writings have inspired us, for they are the great storehouses of the world's learning through which we inherit the knowledge that men have accumulated up to our day and have handed on to us, with no effort of our own for our use.

There is a difference between a power plant and a storage battery. We may, if our souls are open to the impressions and influences of art and literature and science, have our own lives enriched and become ourselves the centers of energy. But there is a difference. We can be the author of an idea or the source of energy and power, or merely the echo of an idea or the transmitter of the energy of others. The power plant which creates or rather transforms into some particular useful form the energy which has existed from the beginning makes possible the storage battery which stores it up merely in order that we may use it when, as and where we desire. The man of genius creates ideas and is the source of energy which he usually also applies. The man of talent usually, great though his talent may be, applies the energy that others have given to him.

It requires faith, hope and love to put at the disposal of other men those ideas upon which the happiness of the world depends, and without which life itself would be a dreary thing.

Giving alms to be seen of men is to be condemned, although those who do it have their reward. The widow's mite is the gift that is remembered, for she gave all that she had and was doubtless sorry that she could not give more.

In every instance the Philadelphia Award has been given to a person who has borne and is yet bearing the burdens of others and therein finds the height of human happiness. Burdens are borne for others who cannot bear them for themselves, but who need greatly some aid, some sympathy, some sharing of the weight of the burden on the part of others to help them in the accomplishing of the purposes they recognize as the purposes of their own lives. To ease in some way or in some measure the burdens of others; to awaken in

The Gold Medal of the Philadelphia Award.

them a realization of the possibilities of life, is one of the greatest tasks as it is also one of the greatest opportunities that is placed before any man or any woman. To help others to the realization of their own ideals, imperfectly seen it may be, but still ideals toward which they are striving with all the energies of which they are capable, is likewise one of the greatest tasks and one of the greatest opportunities that are vouchsafed to man.

To open a window of the soul on a side from which may be seen a view, beautiful, surpassingly beautiful, but hitherto unknown until that window of the soul has been opened; if we can do that for a fellow man, we have made one of the greatest contributions that a man can make to the happiness of another individual or to a community.

It is the opening of the eyes of the blind, the unstopping of the ears of the deaf, the restoring to them, the giving to them, of the great world of beauty which with blinded eyes they cannot see; or opening to them the marvelous beauties of music and of the sounds of nature which with ears stopped they are deaf to. There are various obligations that rest upon us as individuals and collectively as a community and no obligation is such that aid in fulfilling it may not be found as the expression in action of a leader of men, for the leader inspires those who follow and they follow because they have been so inspired. Maeterlink said in a familiar passage, in substance, that the life of the peasant of Europe today is different from what it would have been had Plato and Platinus, of whom mayhap the peasant never heard, not lived. George Eliot said in "Middlemarch" "the fact that things are as they are with you and me is due in large part to the lives of those who wrote sincerely in their day and now rest often in unmarked graves." What we hear, what inspires our soul may be but the echo of a sound struck long ago. The quality of the echo, nay the very coming to us of the echo, is dependent upon two things—one is the quality of the original sound, and the other, the quality of the surface from which it reverberates.

To change my figure—energy makes itself felt by us first and necessarily because there is a source of that energy without which it could not reach us and then because there is a medium of transmission through which that energy has been conveyed to us. We may be ourselves, and in the case of geniuses of which there are not many in any generation or any century, we may be ourselves the cause of the sound or the source of the energy by which the life of

another is vitalized. It is then that our own souls and minds sound a musical note of our lives that reaches others, the quality of which is peculiarly ours, and which differentiates from every other one who strikes that same note in the same pitch, as the note of a violin differs from the note of an organ or flute. It may be the same note, but there is something individual about it that characterizes it as coming from that person and no other.

If either factor in the creation of an echo is changed or modified the result is also changed. If the original sound were different, the echo would be different. If the reflecting surface were different, the reflection would be different, so that things have come to us from the remote past through a definite line of intermediaries it may be, but things come to us from the genius of the present direct and fresh from the soul of the great. If either factor in the transmission of energy is changed, we receive only a part and not the whole of the energy that should come to us. Some men and some women are like the great resonators or loud speakers of which we hear today. The sound which reaches them is multiplied a thousand fold and through their intermediation reaches millions, it may be.

There are souls that create and there are souls that transmit. Some may transmit not a single sound with its overtones, but may blend it with other harmonious notes or an occasional deliberate and artistic discord so that the original sound when heard becomes a part of a complex. The note is there, it can be heard, but the harmony of the chord may make a deeper appeal to the soul which recognizes harmony as a higher thing than melody.

Life is complex. The contents of the mind and the workings of the mind are complex. They are subject to all kinds of influences. The fact that things as they are, not as we would like to have them, if dwelt upon morbidly as they are by some, render unutterable anguish to those souls, but the thought that things may be changed as a result of the efforts of even an individual or a small group, magnetizing, calling into action a great group or whole community, is a great thought. It is inspiring. Inspiration to work full of faith toward the bringing into harmony, if not into unison, things as they are and our ideal of them as they ought to be furnishes intellectual life with a motive urging it on, and a goal toward which it runs.

Faith in the possibility of realizing our own ideals, even though it be disturbed as it often is by doubts as to our own ability to achieve,

nevertheless sustains the inspiration by a mighty challenge to our manhood.

The interpreter of art or of music or of philosophy, the teacher of what is known to those who know it not, the observation of new facts and phenomena and the correlation and the interpretation of those facts and phenomena contributes to the highest intellectual and spiritual happiness of the world. It is not given to all to discover or even to interpret, but it is within the reach of all to teach others what has been received. He that is able not only to create but also to interpret and then to impart to others the results of his creation and of his interpretation of phenomena and facts places the world under great obligations. He may do all of these things, yea, frequently does do all these things unconsciously, as Emerson said, "Nor knowest thou what argument thy life to thy neighbor's creed hath lent, all are needed by each one; nothing is fair or good alone."

The problems of the modern city come within the purview of what I have been saying, and the citizen who makes no pretensions to genius or to greatness, does his daily task with mind and heart open to what is going on around him may be by that very fact adding to our happiness and comfort and mind, adding to our faith in life and its great purposes.

My mother, on a number of occasions, remarked to me as we were traveling through foreign lands and saw people at work at various tasks, "I am profoundly impressed," she said, "by the lives of those who do the hard work and the drudgery of the world."

The strategy of the greatest general amounts to nothing without the men in the ranks to put it into action, while the men in the ranks are as sheep without a shepherd unless they have leaders who may develop from their own numbers.

We honor leaders when they are successful. We sympathize with them when they are not successful. We reward with medals, with citations, with promotions, the private in the ranks who has performed a notable deed.

No evidence of spiritual forces as the real ruler of the world came to us as a lesson from the great war comparable, I believe, to the thought that in practically every land there is now a shrine enfolding the body of an unknown soldier who typifies to his nation the spirit and the achievement of millions, and who in return, though nameless, receives the homage of a grateful people. Such idealism, though present in a sense cannot characterize the presentation of

the Philadelphia Award, someone may say, but is he correct in saying that? Shall we not later, when we hear the name of that woman or that man to whom the award is given this year realize that in an individual, whoever it may be, actually exists the power of a general in command, the power of the private in the ranks, to do his share in the carrying out the strategy of the great thinker.

The recipient of the Philadelphia Award is of necessity one who planned wisely and wrought successfully, not for selfish purposes, not for personal glory, but because, with such qualities of soul and mind and heart, it was not possible for him or her to do otherwise—for us the service was rendered. We are among the thousands that have had sight given to us, have had our ears unstopped, the windows of our souls opened to the greatness of the contribution to life that may be made by one person.

THE HONORABLE GEORGE WHARTON PEPPER

I hold in my hands a casket of exquisite workmanship. When it is opened, it will be found to contain a medal of gold, a medium for the payment of the award to the recipient, and a scroll upon which the name of the recipient is inscribed. Whose is the name? Is it the name of man or woman? Three years ago the award was bestowed upon one who had set the name of Philadelphia to music and sent it echoing around the world—Leopold Stokowski. Two years ago the choice fell upon one, a man of God, who has proved to be guide, philosopher and friend to more young people in this community than any other single person, and last year the happy choice was made of one who had, unobtrusively and unselfishly, placed within the reach of thousands the means of self expression through art. Who shall it be this year?

Somehow I have an inkling that this year again it is a man and not a woman—but what manner of man? What has been the quality of his life? Of course, it has been a life of service. Of course it must be true that he has spent of himself and of his substance freely for the citizens of this community and for others more remote. Has he done this at large or through the medium of a single institution?

It is always more or less dreary to recite things in retrospect. Instead, therefore, of standing in 1925 and looking backward, go back with me in thought to a time many years ago when this man was young, and let's look forward and forecast the order of his life.

It is a hot June day in 1862, sixty three years ago, and the Class of '62 is holding its commencement exercises. I know how those boys in the top gallery feel when they hear about the class of '62. When I say I graduated from this stage thirty eight years ago this year, I am sure that they will feel they are watching the moving picture of "The Lost World," seeing brontosaurs and dinosaurs with queer shapes strutting across the stage which it would be more decent for them to vacate. But here is a hot morning in June in 1862, and the stage is set for the commencement exercises. I look at that little group of men and I recognize the features of some of them. I see my own father in that class; I see my stepfather; I see my uncle, Dr. William Pepper; I see our dearly beloved and lamented friend, John Cadwalader. I see many men destined to become notable in the life of this community. And there is a student graduating at the head of his class who is delivering in Greek the commencement oration. Look forward over the course of his life. In three years he is to win his master's degree. A dozen more and you will find him a trustee of his Alma Mater and a chairman of her most important committees. In the years that follow, you find him identified, unobtrusively, with the continuous growth of the institution. Thirty-two years after his graduation, you can see him in prospect taking account of the great estate to which the University by that time has attained. You will find him reckoning the assets of the University in terms of five millions of dollars. You will find him counting over two thousand students upon her roll. You will find him reckoning the teaching force at close to two hundred; and then you find him the year later, in 1895, honored by election as Provost of the institution. And there ensues one of the most remarkable periods of unselfish, devoted and fruitful service that this country has known—a period of sixteen years, at the end of which, when he voluntarily in 1910 lays down the cares of office, you find that he has placed upon the shelves of the library eight volumes for every one that he found there; you will find that he reckoned a student body double in size of that which was there when he entered upon his duties; a teaching force twice as great in numbers and many times as great in efficiency. You will find that he himself erected sixty three buildings; that he has trebled the acreage of his Alma Mater; that her resources have increased more than three fold; that he has enhanced her prestige among the institutions of learning, and placed Philadelphia in the fore front of centers of American education.

And then, quietly and unobtrusively, having left no inheritance of debt on any building or in any expense account, you find him turning to a different department of service of his Alma Mater, giving himself with unremitting effort to the upbuilding and development of a great free Museum of science and art, carrying on the work of a distinguished predecessor and so insuring that Philadelphia will have in perpetuity a treasure house destined to be comparable to the British Museum in London, and the Metropolitan Museum in New York; and, friends, not only this, but he, during the all but fifty years of unselfish service to you and to me, through his Alma Mater, this man has himself raised by personal solicitation and in cash just a little short of twelve millions of dollars. Have you ever tried to raise a thousand?

And all of it done under the inspiration of a love of learning and loyalty to the institution that breathed into his nostrils the breath of the academic life. And he himself for the advancement of learning and the enlargement of the boundaries of knowledge has created the George L. Harrison Foundation which today amounts to more than a million of dollars and is known and valued all over the world.

And during all this time this fellow citizen of ours, this unobtrusive man, whose course we have fore-shadowed from that hot day in June of 1862, this unobtrusive man has done all these things without pecuniary compensation or reward even during the sixteen years of his provostship—not a penny of compensation for the work done, and a hundred cents out of every dollar in twelve millions has gone undiminished to the cause to which it and he were alike dedicated. But, my friends, it is easy for me to stand here and recite these achievements, but those of you who know what life is; those of you who know against what obstacles one must contend in the development of a great institution; those of you who know what fire of enthusiasm and resistless energy it takes to open the imaginations of those whom you would have partake with you in the great task that you set yourself, will know that in a few words I am telling you the story of a great life. This is the record of one who has wrought mightily from love of learning and from mere loyalty to the institution that nurtured him. Here is a man who has lived into his mature life, through to his three score years and ten, and then beyond; and instead of finding that his strength is then but labor and sorrow, he is working patiently and persistently onward and upward to the end

that Philadelphia may be a happier place to live in; to the end that we may radiate far and find the gladsome light of learning.

My friends, it is the name of this man that is inscribed in the scroll within this casket; it is the name of this man that is inscribed on this beautiful medal of gold; it is the name of this man that I now pronounce to you, in virtue of the authority conferred upon me by the trustees, and on behalf of the founder as the worthy recipient of the Philadelphia Award in 1925—a Doctor of Laws, a friend of man —Charles Custis Harrison.

CHARLES CUSTIS HARRISON, LL.D.

Mr. Chairman, Ladies and Gentlemen:—Naturally my first thanks are due to Mr. Bok, who cares nothing for money except to make the best use of it, and by whom the Philadelphia Award was made solely possible. After that, and with deep sincerity, to the Presiding Officer, to the Provost of the University of Pennsylvania, to the President of the Philadelphia Award, Senator Pepper, who has just made the presentation address, and last, but not least, to the Committee upon the Philadelphia Award, by whom the present choice was made.

Of course, I can say nothing in addition to the words which Senator Pepper has so generously spoken, other than to accept gratefully the decision of the committee, the words which have been spoken here tonight, and the evidences of the award which just have been handed to me.

It would be quite impossible for me, happily to accept this great award without full recognition of the indebtedness which I have owed for many years to others, without whose constant care and devotion whatever may have been accomplished during the last fifty years would have been out of the question.

This indebtedness is due—first of all to my father, who as he was one of the best, so he was one of the ablest of men, helping me in season and out of season, and turning my thoughts in certain directions with the best help of his advice and judgment from day to day.

But even more than to him, I owe that debt of gratitude to her, who, though no longer with me, stood by my side in every public work which I undertook during the entire fifty two years of our married life together. Living in a certain sense in the past, one of the chief enjoyments of the privilege which has now been bestowed upon me

is to be able to name to this audience my father and my wife, to both of whom my daily thoughts always turn, and who will be remembered with even greater fervor of affection from this time forward.

I do not know that I can add any further words, except that it may be a pleasant thought to this great audience to know that I am one of a large group whose name I bear, who for generations, even from the founding of the city, have been Philadelphians.

I beg again and finally to thank you all for your generosity, your courtesy and your great kindness.

Comments of the Philadelphia Press on the Philadelphia Award

A WELL MERITED AWARD

Dr. Charles Custis Harrison's devoted and disinterested service to the cause of education and to the community of which he has been one of the brightest ornaments has been of such a character that no distinction, no especial honor, could enhance the esteem in which he is held by his fellow citizens. Nevertheless, the conferring upon him of the "Philadelphia Award" for service "calculated to advance the best and largest interests of Philadelphia" will be hailed everywhere as a well merited recognition, wisely and justly bestowed.

For Dr. Harrison's contribution, in personal service and in material aid, to the University of Pennsylvania and to the University Museum cannot be measured in dollars and cents, nor even by the growth of these institutions in usefulness and public estimation. It was Dr. Harrison's personal example of untiring and selfless devotion to the best interests of the college and the museum, the inspiration of his guiding influence, which won for them a support and a co-operation of immeasurable value and importance. The record of that service is written in stone and steel, it is true, for coming generations to see and emulate, but it is engraved more deeply still in the hearts and memories of his contemporaries and in the impress which it has made on the permanent policy of the University.—*The Public Ledger.*

MERITED HONOR TO A USEFUL PHILADELPHIAN

All those who are familiar with the life and the civic activities of Charles Custis Harrison will agree that no mistake was made when he had conferred upon him the Bok Award. The scroll of fame, the gold medal and the $10,000 check which go to this distinguished

educator and philanthropist only serve to emphasize the esteem in which he has been held by his fellow citizens.

The reasons given for bestowing this particular award upon Dr. Harrison are starting work on a new University Museum plan; completing a new wing of the museum at a cost of $500,000; bringing the unrivaled collection of Oriental art, valued at $2,000,000, to the museum; financing the expedition of the museum in connection with the British Museum at Ur of the Chaldees, and his many charitable gifts. But the work that he did during the past twelve months only added to the good he has been doing all of his life. While he was the Provost of the University he raised more than $11,000,000 for the institution; he completed forty seven buildings on the grounds; he fathered Franklin Field; he raised $4,000,000 for the University Museum; he gave $500,000 for the George Lieb Foundation; he collected $250,000 for the memorial chapel at Valley Forge, and for half a century he has been a leader in good movements.

It is well to speak of these things during the lifetime of such a busy and useful member of society. His personal modesty and unostentatious life have only been equaled by his activity and aggressiveness in helping to advance everything likely to be desirable for the city. We have had other men of this type in this community, but it is doubtful if any one has been able to accomplish more than Dr. Harrison during his long span of life. When he passes away from this earthly sphere he will leave many monuments to himself, all of them conceived in an unselfish spirit. His heart has been in the University of Pennsylvania and naturally most of his work has been in the interest of that great institution, but those who know him best are aware that he has not permitted his benefactions to halt there.

It is characteristic of the man that he should at once decide to present the cash award to some worthy object. The first and last thought in connection with the incident is that the judges have honored themselves and the City of Philadelphia in honoring Charles Custis Harrison.—*The Philadelphia Inquirer.*

A WELL DESERVED DISTINCTION

He would be captious indeed who would find any ground for criticism in the honor conferred upon Dr. Charles Custis Harrison in being selected for the Philadelphia Award of 1925. No Philadelphian would seem more deserving of it, for in his long and most useful life no one has served his native city more unselfishly, more mod-

estly and more generously. To his labors as Provost the University of Pennsylvania owes much of its remarkable growth of the past quarter century, and when he laid down that burden it was only to take up that imposed upon him by the claims of the University Museum. To him more than to any other one person the rapid development of that admirable institution is largely due, and it is a good thing that Philadelphians should be made acquainted with his great service in this direction during the past year.

It has always been characteristic of Dr. Harrison that he has subordinated himself in his many lines of civic activity, and for this reason the general public has a faint conception of how useful and valuable a citizen he has been. It is gratifying, therefore, to see that the directors of the Philadelphia Award have not overlooked this modest gentleman, but have recognized his great services in the only way possible to him. Still active in his eighties, there are more years of usefulness open to the recipient. His remarkable record makes it certain that he will continue to spend himself in the public service until the very end.—*The Philadelphia Record.*

A BUILDER HONORED

A man to whom a great university is a monument needs no prize for his good deeds—except in so far as the awarding of the prize concentrates attention on the man himself and increases the number of persons who know and appreciate his life work.

The Philadelphia Award cannot make Dr. Charles Custis Harrison greater than he has been. But it can make his fellow citizens greater by emphasizing his example. Doctor Harrison has been a builder. His forebears have been builders. This year's prize winner, as provost of the University of Pennsylvania, completed forty seven University buildings. He raised $11,000,000 for the University. He has made the University Museum one of the great institutions of its kind in the world. He has made possible the erection of a divinity school and he has made countless benefactions to charity.

The city is very glad that Doctor Harrison publicly and officially has been designated the great builder he has always been. And the city hopes his active life is not nearly over and that the man himself, as well as his shining deeds, will remain through many a helpful year.—*The North American.*

THE EXPEDITION TO UR

By C. Leonard Woolley

Director of the Joint Expedition of the British Museum
and the University Museum, to Mesopotamia

AT the beginning of November, 1924, the Joint Expedition of the British Museum and the University Museum resumed work for the third season at Ur of the Chaldees. Mr. C. Leonard Woolley remained in charge and Dr. Leon Legrain, Curator of the Babylonian Section of the University Museum, joined him as second in command and as specialist in Babylonian antiquities. Mr. J. Linnell is the third member of the expedition. Mr. Woolley's reports are submitted at the end of each month and are regularly released to the press of this country and of Great Britain simultaneously. It is Mr. Woolley's practice to prepare two separate sets of reports, one very full as to detail and technical in language and the other with less detail and in language that avoids technicalities. The reports or November, December, January and February have been received. The less technical versions prepared by Mr. Woolley for general readers are given here with a few of the photographs made by the Expedition. On the 8th of March the work of the Expedition came to a close for the season and the members were travelling by way of Baghdad and Aleppo to London and to Philadelphia.

Editor.

Ur of the Chaldees,
December 6, 1924.

The Joint Expedition restarted its work at Ur on the first of November and can now report a month's further progress in the unearthing of the monuments of the buried city of Abraham. Last season we had cleared the Ziggurat, the huge brick mass which, a second tower of Babel, dominated the whole town, but though we had dug down to its foundations we had found that these stood high above the level of the plain and must themselves rest upon an artificial platform. This year our main task was to trace this plat-

E-Dublal-Makh, the Hall of Justice. The northeast face after the removal of the Neo-Babylonian level, showing a paved court of the Larsa period, about 2100 B. C., the walls of the Ishme-Dagen building strengthened by the kisu of Kuri-Galzu and the standing walls of Kuri-Galzu's building above; about 1600 B. C.

form and to discover what were the surroundings of a ziggurat, whether it was an isolated structure or whether it formed a part of a more considerable complex.

Work was begun to the northwest of the tower, between it and the wall of the sacred enclosure which we had planned in our first season. Almost at once we came upon ruined buildings, but these proved to be of late date, the living quarters and store rooms of the priests who in the Persian period still clung to the perhaps already ruined temple and collected from the faithful few the tithes of grain and oil which in scanty measure were paid to the once supreme Moon God. Below these stretched the wide courtyard laid out by Nabonidus, last King of Babylon, when he restored the ancient ziggurat, an open space covering the whole area between the Tower and the enclosing wall, which we now for the first time recognised as belonging to the late Babylonian period. Under the courtyard floor came all that was left of a great range of buildings dating from the sixteenth century B. C., and under these again still older walls of shrines put up, as the inscribed clay cones from their foundations shewed, by the kings of Isin and Larsa who ruled Ur two thousand years before Christ: it was obvious that in early times there had been round the ziggurat shrines, store houses and priestly dwellings which more or less masked its bulk and were placed here not for architectural effect but for practical purposes, to fulfil the complicated needs of what was not a church but the palace of the reigning god who had had about him a whole crowd of ministers and administrators devoted to his comfort and dignity but also directing his material estates. How various their functions might be was illustrated by the contents of a small hoard of clay tablets found in another building, part of the business archives of the temple of E-nun-mah; here were receipts for corn and oil, butter and milk and cheese, brought in by the farmers and the diarymen to their overlord the Moon god, and here too notes of the issues of the same—rations to the temple servants, a half bottle of the best oil for the head of a man who was sick, and all the petty routine of a big estate agency. For the smallest item there was a permanent record in the shape of a clay tablet duly witnessed and dated, for these old Sumerians were a business like people, and every month the complete list of tithes paid was drawn out on sheets of clay nearly a foot square ruled like the pages of a modern ledger. With all these goods to store and with the offices for their administration plenty of space was required, and

Nebuchadnezzar's Pavement behind the Temple of Nin-Gal, laid down about 700 B. C.

it is not surprising to find that the subsidiary buildings attached to the god's house cover a wide area of ground.

But it was when we had dug down through the stratum representing the period of the Larsa kings that we found what was the primary object of our search, the terrace wall of Ur-Engur, the original builder of the great ziggurat itself; it was a massive wall, buttressed and sloping sharply inwards as befits a retaining wall of a platform, built of unbaked brick, and in rows at regular intervals there were driven into its face nail shaped cones of fired clay, their round heads forming a pattern on the wall, their stems inscribed with the name of the king and the dedication of his building to the god of the Moon. For the first time these inscribed cones had been found in position and their real use made clear;—for the first time we can get some idea of what the ziggurat looked like in its original setting when in 2300 B. C. Ur-Engur "built a terrace and filled it with refined clay and set the House in the midst of it."

Excavations on the southeast side of the ziggurat, close to the temple of E-nun-mah which we cleared two years ago, have proved not less interesting. A fairly high mound of rubbish covered a building which had been excavated by Mr. Taylor in 1854; Taylor's summary publication did not encourage hopes of any important finds to be made at least on the upper levels, but for the planning of the city it was necessary to expose anew what he had unearthed and thereafter to dig down to the presumably more fruitful strata below. Actually the top building which Taylor had partially dug has proved to be more than worth while. There are two main chambers with walls of burnt brick of a surprising thickness, quite incommensurate with the apparent insignificance of what was supposed to be a small house of late date; the two principal doors are very wide, and from the first room two small arched doorways give access to chambers built of mud brick lying on either side of the main rectangle. The whole thing is on a small scale, and it was surprising to find on the brick stamps in its walls that it was entitled "E-dub-lal-mah," the Hall of Justice; but when the plan was put on to paper the real nature of it became clear, for the plan was that of a triple gateway of which the back door had been blocked up by a later cross wall, and the mud-brick chambers alongside had been built in or over the ruins of the massive double wall in which the gate tower had originally stood. Doubtless of old the judges "sat in the gate to give judgment," and when the remodelling of the sacred area and the aban-

E-Dublal-Makh. View of the courtyard and Shrine of the Kuri-Galzu Period. About 1600 B. C. On the left of the Shrine Door are Kisu and Walls of the Sinbalatsu-Ikbu and Nabonidus Reconstruction Periods.

donment of this part of its wall line made the gate as such useless, the gate tower was preserved to fulfil its traditional function and a new wall was built behind to close it in and turn it into a regular justice hall.

Later discoveries, even on the higher level, confirmed what the plan had shewn. Fresh brick inscriptions speak of the gate and the fortifications and the terrace to which the gateway led up; and by one of the arched doors was found a magnificent green stone gate-socket shaped as a serpent with a hollow in the top of its head wherein the pivot of the door hinge turned, on the base of which Sinbalatsu-ikbi, Assyrian governor of Ur about 650 B. C. had caused to be written a long inscription recording his restoration of the fallen tower and his setting up of new gates made of costly foreign woods, bronze and silver and gold.

We have yet far down to go before we bring to light the original gate and discover who first set it up: at present we are dealing with the building in its last phase. We know that by 2000 B. C. it had to be repaired by Ishme-dagan king of Larsa, and that again in 1600 B. C. it was in a ruinous state, even its foundations giving way, so that they had to be strengthened and a protecting wall built up against them by Kuri-galzu the Kassite king; nearly a thousand years later Sinbalatsu-ikbi rebuilt it, and still it served as the great gate of the Temenos, the gate, probably, which spanned the Sacred Way, and through its portals on feast days passed the processions going up to the central terrace from which rose the towering bulk of the ziggurat. But what stands above ground today represents the Hall of Justice in late Babylonian times; it may well have been Nebuchadnezzar who laid out the spacious court in front of its doors, and the pavements of the side chambers bear the stamp of Nabonidus, the last of the Babylonian kings (550 B. C.); a huge mass of brick-work blocks the old exit. Yet the walls which stand eight to ten feet high above the late pavement are the old walls which Kuri-galzu restored, and even the arch, preserved intact over the narrow door-way, may date back to his time and be the earliest example known of an arch used on the facade of a building as an architectural feature.

Ur of the Chaldees.
December 31, 1924.

During December the Joint Expedition has been carrying on work on both the sites described in my last report. In that I

Clay Pedestal inscribed with an account of Excavations carried out at Ur by Sinbalatsu-Ikbi and with copies of texts on the bricks of Bur-Sin found by him in the Ruins. Seventh Century B. C.

announced the discovery of the mud brick wall built by Ur-Engur in 2300 B. C. to support the terrace on which stood his great ziggurat tower, a buttressed wall in the brickwork of which were inserted clay cones stamped with the king's name: now we have been able to work out the problems of an unusually tangled site and reconstruct the history of what was the religious centre of the city of Ur.

Ur-Engur's terrace covers yet older buildings of which our deepest trench has failed to produce any material trace, though the filling was rich in fragments of early pottery and there came to light one delightful little shell plaque engraved with the full length figures of two royal or divine persons which must date back to at least three thousand years before Christ. Probably the actual buildings of that period are buried beneath the mass of the ziggurat, where they are safe from the explorer's disturbing hands. On the terrace, at the ziggurat's foot, Ur-Engur erected the House of Nannar the Moon God; it was a walled courtyard with buildings along two sides; of these one, a small but apparently lofty chamber, was probably the shrine wherein stood the statue of the god; the others probably served as storerooms for the offerings made in his honour: it was perhaps due to some tradition dating back to primitive times that the walls of the more important rooms were of crude mud brick, the simplest and oldest building material of the land.

The Third Dynasty of Ur, which Ur-Engur founded, lasted for less than two centuries and then, about the time of Abraham, collapsed as a result of the disastrous wars with Elam. The enemy put Ur to the sack, they overthrew the House of Nannar, and the statue of Nannar itself was carried off in triumph to the Persian highlands. The traces of their destruction are clear to this day in the ruins of the old shrine. Ur did not soon recover, and the hegemony of Mesopotamia passed to other hands, but the new kings of the cities of Isin and Larsa looked with favour on the town of their predecessor. Gimil-Ilishu of Isin brought back the statue of Nannar from Anshan and reinstalled it at Ur, and the son of king Ishme-Dagan, En-an-atum, who was high priest of Nannar at Ur, started to repair the buildings on Ur-Engur's terrace. Most of the Larsa kings who succeeded him did something to restore the same shrine—one whole range of chambers was rebuilt by Sin-Idinnam—but these rulers were none too powerful or wealthy, and their work is of a poor type, a mere patching of the ruins. A change comes with Warad-Sin, one of the last and greatest kings of Larsa. He built much at Ur, and

Diorite Boundary Stone (of about 2250 B. C.) from the Cloister Museum founded about 550 B. C.

on the particular site with which we are now dealing he threw out from the old terrace front a fortress-tower of solid mud brick faced with burnt brickwork, containing staircases and a sally port to the low ground at the terrace foot, the whole eloquent of those troubled days and of the king's constant wars with Babylon whose rulers disputed with him the overlordship of Mesopotamia. When, after his time, Babylon won the rubber, Ur suffered once more from sack, and thereafter from long neglect; the buildings of the Larsa period sank into decay. It was not till about 1600 B. C. that a Babylonian king turned his attention to the ancient city; but then Kuri-Galzu the Kassite took its repair seriously in hand. Already one of the Larsa kings had refaced Ur-Engur's terrace wall with burnt brick; Kuri-Galzu added to this a fresh facing, thereby still further widening the terrace, and above it he rebuilt one complete range of rooms, following closely on the lines of the former buildings, and the other range, which may have been in better state, he must have repaired, though the actual ruins shew no trace of his work. He also restored Warad-Sin's fort.

Up to this time the successive restorers had observed with reasonable piety the traditions of the site, so that the terrace of Kuri-Galzu was not altogether unlike that of the earliest builder; and up to this time our history of the work done on the site is sure. About Ur-Engur's walls, scanty though their relics are, there is no doubt; the minor kings of Isin and Lars left us their inscriptions on bricks in their walls or on scattered foundation cones, and in the case of the fortress of Warad-Sin we found a whole row of his great nail-shaped clay cones embedded in the brickwork just as they had been put there by the builders; Kuri-Galzu too was not sparing in the use of bricks inscribed with his name. But after his time a change took place. In the course of the next thousand years the buildings collapsed and their debris fell down from the terrace edge and filled in the low ground at its foot, and when at last a new builder came on the scene that scene was so different that not only the old ground plans but even the old ground levels had been obliterated. A nameless ruler, perhaps Sin-balatsu-ikbi, who was Assyrian governor of Ur in the seventh century B. C., laid his floors above and beyond the original terrace walls and used for his work bricks of all dates pulled out from the ruins of forgotten shrines; it was shoddy work, and today its remains look shoddier yet, for the paved floors go in waves and billows as the hidden walls below support them or the loose packed

Looking across the Forehall of E-dublal-Makh, the Court of Justice of King Nabonidus
550 B. C.

rubbish has given way, and the broken walls gape and lean at indecent angles, while the patchwork of material shewing the mutilated names of kings whose reigns were a thousand years and more apart condemns a decadent age.

Lastly came the Neo-Babylonian kings, Nebuchadnezzar and Nabonidus, and found again a ruin so complete that they were enabled if not forced to remodel the site. Round the whole sacred area of the city they built their great double wall, enclosing the ziggurat in its western angle and reaching out to the northwest beyond the vanished terraces and beyond Sin-balatsu-ikbi's buildings, but returning again to link up with the solid mass of Warad-Sin's fortress, which they restored anew. In the west corner of this temenos wall was set a massive fort of mud brick. From Warad-Sin's fort another double wall ran southeast, in front of the Ziggurat steps, to the ancient E-dublal-makh, the old Gate tower and Hall of Justice, which now became part of the fortifications, and thence it ran southwest to meet the Temenos wall at a point where a fourth fort seems to have completed the scheme. Thus the Ziggurat was girded about with a wall of defence, standing in the centre of a rectangular enclosure having a fortress tower at each corner. All this had no relation to the old plan, but though the former buildings were buried deeply under the floor of the court that stretched between the Ziggurat and the new walls, yet the tradition must have survived that hereabouts should be the House of Nannar—and Nabonidus was not the man to disregard tradition. When then we find in the angle between the flights of stairs leading up the Ziggurat a series of chambers the asphalte of whose floors is laid over bricks stamped with the name of Nabonidus, we can only conclude that here, not knowing where the original shrine stood, he set up his new House of the Moon God.

I said that the Neo-Babylonian kings came last, but in truth there were others after them. In the days of Cambyses the Persian, when the temples of Ur were falling into decay and men were turning themselves to other gods, in the shelter of Nabonidus' court an impoverished priesthood built with mud and broken bricks crooked hovels for their own shelter and stores and granaries for such tithes as the faithful might yet offer. Today their ramshackle walls stand separated by only a few feet of rubble from the top of the terrace wall of Ur-Engur: in the tangle of walls that intersects those few feet is recorded the story of two thousand years of a great city's life.

Shell engraved Plaque of the Archaic Period, found under the Terrace of Ur-Engur. About 4000 B. C.

Ur of the Chaldees,
January 31, 1925.

Throughout January, in spite of a cold which at times felt almost Arctic, the Joint Expedition has carried on the work of excavation at Ur, and the results, though not sensational, have certainly been interesting. As usual, we have been digging on two separate sites at once, thus making full use of our two foremen, Hamoudi and Khalil, and creating a healthy spirit of rivalry between the gangs.

In my last report I described the discovery of the convent built by king Nabonidus for his daughter Bel-Shalti-Nannar, the High Priestess of Ur; we have now gone further with this work and laid bare the whole building—or at least so much of it as is preserved—and find that it comprises within its walls regular houses with private courts and rooms as well as the work chambers and offices which we first encountered: the largest of these may well have been the quarters of the Princess herself, for the tiles of the floors are stamped with her father's name and the phrase "the House of the High Priestess." Owing to the ruined state of the building its clearance did not take very long, and early in the month we started to dig down to the lower levels, and below the Convent we found another large complex of buildings first put up about 2000 B. C. by the rulers of Larsa to whom Ur was then subject, and later restored by Kuri-Galzu the Kassite king of Babylon; now virtually the whole of this has been excavated, and with it the great paved court which lies between it and the Hall of Justice described by me in a former report. It is always rather disappointing to look down into a hole and to be told that what you see at the bottom was once a palace or a temple: today at Ur one can wander from room to room between walls eight feet high and come out into the wide spaces of the court whose trim pavement of kiln baked bricks was laid down more than three thousand years ago and above one the fluted walls of the Justice Hall which, though shorn of most of their height, still dominate the buildings round. At the foot of the pedestal on which it is raised are the remains of the brick platform where the priest stood and poured his libations when the great gates of the temple were flung open in the morning; the Arab workmen in their long cloaks going up the steps that lead to the temple door might belong to any age; and it is easy to forget that so many centuries have passed, leaving only ruins, and to imagine for the moment that all is as it was, that the bare

Gateway from the Hall of Justice to the street leading to the Temple of Nin-gal, the Consort of the Moon God.

walls are clothed again with plates of silver and brass and that in his inner shrine Nannar is still enthroned.

All about the courtyard were fragments of stone, the wreck of statues smashed to atoms by some enemy, and it is tantalising to recover on such the inscriptions which tell that these were the offerings or even the portrait figures of early kings of the city; but the destroyers have done their work only too well, and bits of the same sculpture may be found hundreds of yards apart, and though all are sedulously collected there is small chance of reconstructing anything entire. In the complex of rooms beyond the court there were found above and below the brick floors hoards of clay tablets dealing with the business side of the Temple administration and shewing that this building was one of the industrial centres of the Nannar shrine where the women and children attached to the god's service were employed on such tasks as weaving the wool which the tenant farmers of the Temple domains brought in as rent and tithes. In a former letter I gave some account of the contents of the many tablets of all sizes which have been labouriously extracted from the ground and baked and brushed and mended by Dr. Legrain; their complete translation is necessarily a question of some time, but already he has been able to extract from them enough to give a new and very human interest to the ruined chambers whose mere ground plan might have told us so little. As it is, a copper smelter's furnace takes on a new importance when it illustrates a text recording the amounts of metal paid in to the temple by the coppersmiths of the city, and even the long storerooms become less commonplace when one has the tally of their contents.

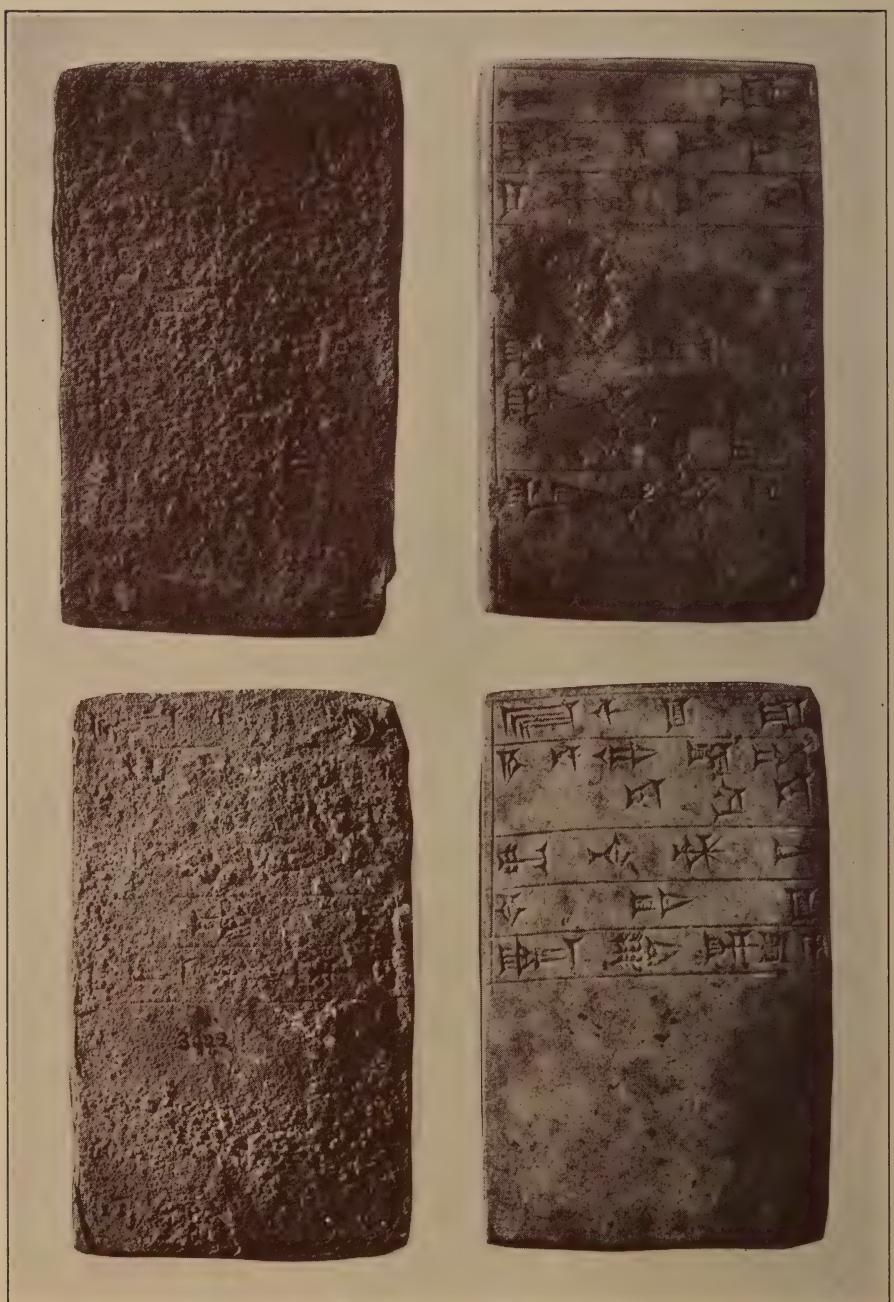
An unexpected discovery has been made in the south angle of the walled enclosure which Nebuchadnezzar built round the Ziggurat tower. Here I looked to find a fort such as stood in the west corner, but the walls which gradually came to light from under the heaps of ashes covering the whole area soon took a different shape, and one could recognise a temple which inscriptions on bricks and stones proved to be that of Nin-Gal, the Great Lady, wife of the Moon god of Ur. The building on which we are now engaged—for its excavation is not yet complete—occupies the whole of the south corner of E-temen-ni-il, the terrace enclosure of the Ziggurat. Most of the walls are of crude mud brick of miserably bad quality, often ruined right away and where still standing to any height extraordinarily difficult to follow; my most experienced pick men have found their

Paved Courtyard in the Hall of Justice.

skill taxed to the utmost to distinguish between fallen mud rubble and brickwork so soft that one can rub it to powder with one's finger; but the floors are of brick well laid and thickly spread with bitumen, looking like modern asphalte, and with their help all the outlines of the chambers could be traced even where the walls enclosing them had altogether perished. The temple was built, in its present form, by Sinbalatsu-ikbi, the Assyrian governor of the city (c. 650 B. C.), who always seems to have been short of cash for his building schemes and so to have employed the poorest materials; fifty years later Nebuchadnezzar added, or repaired, some of its outbuildings, and later again his grandson, Nabonidus, repaved the temple floors. The plan is the best thing about it—it is remarkably regular in its layout and really dignified in conception: from a forecourt flanked by small chambers a pylon gate gave access to the entrance chamber or pronaos: doors on either side of this led to subsidiary suites of rooms filling the angles of the temple enclosure; and from the pronaos, facing the entrance, a flight of shallow steps ran up to the naos or shrine chamber wherein on a raised base surrounded by a screen wall of burnt brick, was set the statue of the goddess. Somebody has been before us here, for the solid pavement of the shrine has been broken through, and a gold bead and fragments of gold leaf lying in the disturbed soil shew that the foundation deposit has been removed; but we have no need to give up all hope, for below the ruins of this Late Babylonian temple are those of a far earlier building of the same character, and though as yet we are busy with the upper levels only, the few trial pits that have been sunk into the lower strata have given more than promises of good results: we have inscribed door sockets of several periods, inscribed foundation tablets in black and white stone and in copper with texts of Kuri-Galzu and of Warad-Sin of Larsa (2072–2060 B. C.) and one of the earliest inscriptions yet found at Ur describing the foundation of the temple by a local governor "for the life of Utu-Hegal king of Erech" who was suzerain of Ur before Ur-Engur won his independence and founded, about 2300 B. C., the dynasty which gave to the city its greatest prosperity and its most splendid buildings.

Ur, March 5, 1925.

The season's work of the Joint Expedition of the British Museum and the Museum of the University of Pennsylvania comprised four months' digging, the last month being the banner month with regard



Foundation Tablets of Kuri-galzu from the Temple of Nin-gal. The Tablets on the left are of copper and are encrusted with salts of the metal. The two on the right are of limestone and show perfectly preserved surfaces.

to finds, to crown the year with just that sensational discovery which had been lacking in its earlier months.

At the end of January we were still engaged on the excavation of a temple built in honour of Nin-Gal, wife of the Moon God, by Sinbalatsu-ikbi in 650 B. C. and restored by Nebuchadnezzar and his gransdon. In February we continued this work and completed the plan of the building, clearing what was left of its courtyard and the small chambers round it and finding the well in the court. A curious feature was that in the well head there were numerous bricks stamped with the name of Sinbalatsu-ikbi but having in their text variants which showed that the Assyrian governor had put up shrines and statues of no less than eight deities other than Nin-Gal herself; the principal sanctuary where the great brick statue base was found in position must have been surrounded by a whole row of minor chapels like the side chapels of a modern church in France or Italy. Having planned and photographed the late temple we proceeded to destroy it, for in its miserable condition it was not a monument worth preserving and certainly there were older ruins below waiting to be dug out. The destruction was soon repaid: under the sanctuary walls there stood in position, just as they had been placed two thousand five hundred years ago, thirteen baked clay cones beautifully inscribed with the Assyrian's dedication of his work, new texts belonging to a little known ruler; and five feet below the workmen came upon the walls and paved floors of the next period. Generally the royal builders of Ur followed religiously the lines laid down by their predecessors, and each new plan is a copy of the old; but Sinbalatsu-ikbi, perhaps because he was a foreigner, had taken no account of such tradition, and the lower temple was of a different type and differently orientated from that above it. Built by Kuri-galzu in the middle of the second millennium before Christ, this House of Nin-Gal with its courts and store rooms occupied the whole space between the S. E. face of the Ziggurat tower and a paved street which ran N. E. by S. W. from the great court of E-dublal-makh to the limit of the sacred enclosure: a double doorway in a projecting gate tower formed the entry from street to temple, and immediately facing this was another similar doorway giving access to another temple on the south side of the street whose excavation we have only begun. In the filling of Kuri-galzu's building we found the head of a small statue of a priest finely carved in black diorite, a work of about 2200 B. C., and a written monument of an earlier day, a steatite tablet

Part of the Great Stela of Ur-Engur.

A Scene on the Great Stela of Ur-Engur.

The Moon God Nannar is seated on his throne, holding a measuring rod and line, in his right hand, in his left a bronze axe. In front of him is a tall vase in which is planted a date palm. To the left of this is seen the mouth of a water jar from which a stream of water flows into the palm vase. This jar was held in the hand of the King (broken away) who was shown watering the palm tree.

recording buildings by Gudea; Gudea, who was governor of the town of Lagash about 2350 B. C., is well known from the French excavations at Tello and from the portrait statues of him now in the Louvre, but it had not been suspected that his power stretched so far afield as to include Ur. Kuri-galzu's walls are built upon a brick pavement which may be five hundred years earlier than his time, but we shall have to dig deeply yet if we are to find here traces of the work of the patesi of Lagash.

For the rest, our extra funds have enabled us to clear the west corner of the courtyard and further ranges of rooms flanking E-dublal-makh, the old shrine and Court of Justice described by me in a former report. Had this work not been done in the present season it might well never have been done at all, for it is never very tempting to polish off the odd corners left over from a pervious year, especially when there is no reason to suppose that anything of value will be found; even as it was I hesitated to spend money on continuing what had been hitherto the unremunerative task of digging down through seven feet of hard soil to a brick pavement, and it was more obstinacy than anything else that made me go on. Almost the first day produced in one room a door socket of king Bur-Sin (2200 B. C.) with an inscription in 52 lines giving the history of the temple's beginnings, a very welcome record; but it was in the western wing of the great court that the discovery was made which overshadowed all others. Here the pavement was littered with blocks and lumps and chips of limestone, ranging in size from four feet to an inch or less, some rough, others carved, some pitted and flaked with the action of salt, some as smooth and sharp as when the sculptor finished his work; and all, or nearly all, belonged to one monument, the most important yet found at Ur.

This monument was a stela or slab five feet in width and perhaps fifteen feet high, carved on both sides with a series of historical or symbolic scenes arranged in horizontal bands of unequal heights. It bore a long inscription, now fragmentary and with the king's name missing; but here luck favoured us, for on a mere flake of stone, the drapery of a figure otherwise lost, there is inscribed the name of Ur-Engur, and we can therefore identify the author of the stela with the founder of the Third Dynasty and the builder of the Ziggurat. The fragments found by us represent only a fraction of the whole carved surface: none of the registers is complete, some have disappeared altogether, of most we have only bits, often dis-

Detail of the Great Stela of the Ur-Engur. The King with Builders' Tools goes to build the Ziggurat; accompanied by the High Priest.

Detail of the Great Stela of Ur-Engur. The High Priest accompanying the King as he goes to Build the Ziggurat.

connected, from which to reconstruct the design; but even so the monument ranks with the famous (and equally fragmentary) Stela of the Vultures in the Louvre as one of the two most important relics of Sumerian art known.

The reliefs illustrate king Ur-Engur's care for his people as shown by the digging of canals for the irrigation of the land, and his piety in building for the Moon God the great Ziggurat of Ur. What remains of the inscription is a list of the canals made by him, and this is illustrated by a most curious scene in the top register of the stone: the king stands in an attitude of adoration before the seated figure of the god, and above his head is an angel flying down from heaven and holding in her outstretched arms a vase from which streams of water pour out upon the ground: the scene, which appears on both sides of the stela, seems to have been repeated several times in the register, perhaps with an angel symbolising each of the principal canals. The whole conception is new to us, and the graceful figure of the angel is unique in Mesopotamian art.

Other scenes are those of sacrifice to the gods. In one, two men have thrown a bull down on its back, one grasps its forelegs and sets his foot upon the beast's muzzle while the other stoops forward and seems to be cutting it open to examine the liver for omens; a third man has cut off the head of a he goat and, holding the body in his arms, pours out the blood from the neck before a smaller figure, perhaps the statue of a god, which stands upon a low pedestal; others pour libations of water upon a simple pillar like altar. In another scene two men are lustily beating a great drum; in another there seems to be a row of prisoners, a record probably of the king's conquests. But most interesting of all are the pictures of the building of the Ziggurat, shown upon three registers the main fragment of which appears in my photograph. In the upper scene we have the Moon God Nannar seated upon his throne and receiving the worship of the king who pours the water of libation into a tall slender vase wherein are palm leaves and dates; a continuation of the stone gives the rest of the scene. On the left, corresponding to Nannar, is seated Nin-Gal, the Moon's consort, and the king reappears before her making the same libation; in each case behind the king there is an attendant goddess who assists in the sacrifice. Nannar holds in his left hand a pick axe, and in his outstretched right hand the measing rod and line of the architect: here then Ur-Engur in a vision receives from the god himself the order to build him a house. In

Detail of the Great Stela of Ur-Engur. Head of a Divinity who introduces the King Ur-Engur to the Moon God.

the next register, only the top left hand corner of which is preserved, one of the minor gods ushers into the presence of Nannar the king who comes to declare his readiness to obey the divine instructions; upon his shoulder he carries pick axe and basket, compasses, the ladle for the bitumen mortar, and the flat wooden trowel of the bricklayer, as if he would himself take part in the work and lay the first brick: behind him comes a shaven priest who solicitously relieves the royal shoulder of its unaccustomed load. In the register below, represented now only by small fragments, there was pictured the actual building of the Ziggurat; the background is formed by the wall of the tower, and against this are ladders up which go men carrying on their heads baskets of mortar. Fortunately the surface of the stone is in these fragments wonderfully preserved, the carving sharp and fresh, and we need not draw upon our imagination to do justice to the skill of the unknown artist who in 2300 B. C. designed and wrought this splendid monument: the simple treatment of the drapery, the restrained faithfulness of the rendering of the body muscles, the delicacy of the features of the different faces, show the hand of a real master: And if we have here in such excellent state a magnificent example of the art of the time, we have also a historical document whose appeal is not less direct. The Ziggurat of Ur is the most imposing relic left in Mesopotamia of the land's early grandeur; now chance has given to us the pictorial record of its building and a contemporary portrait of the great ruler who was inspired to build it.

A GREAT TEMPLE OF BABYLONIA

By C. Leonard Woolley

Director of the Joint Expedition of the British Museum
and the University Museum, to Mesopotamia

MORE and more clearly as the work of excavation goes on at Ur of the Chaldees do we see the real nature of the Moon God's temple. To understand it one must rid one's mind of all ideas derived from the self contained and isolated unity of the temples of Greece, of Rome or of Egypt; here there is a different conception of the deity and corresponding to that a different conception of how he should be housed. The Babylonian god was a king, the Lord of his city; he controlled its destinies much as did the temporal ruler and therefore he must have his ministers and his court; he was a great land owner, and therefore he needed stewards to manage his estate: there are preserved lists of the functionaries attached to a temple which have a curiously mundane sound; of course there is a High Priest and a body of priestly satellites, but we find too the Sacristan, the Choir Master, the Treasurer, Ministers of War and of Justice, of Agriculture and of Housing, a Controller of the Household, a Master of the Harem, and Directors of Live Stock, Dairy Work, Fishing and Donkey Transport. All these carried on their duties in the Temple precincts, and so the Temple is not a single building but a huge complex which is at once temple and palace, government offices and stores and factories.

At Ur this complex, called E-gish-shir-gal, covered an area some four hundred yards long by two hundred yards wide, surrounded by a heavy wall. In the west corner of the enclosure was a raised platform also defended by walls, whereon rose the ziggurat tower, and below the ziggurat stood the particular private house of the God. If in some respects we might compare the whole temple to a rambling mediaeval monastery, in others we might find the best parallel in a mediaeval castle, with the ziggurat and its platform representing the keep, the walled temple enclosure the inner baily, and the walled city beyond the outer baily; for the god of the Babylonian city was a War Lord, and his house was a house of defence, the final stronghold of his people.

Just as in a cathedral there are chapels dedicated to many saints, so in E-gish-shir-gal there were many shrines where subordinate gods received their worship, but these buildings are relatively unimportant: even E-Nannar, the Moon God's own house on the terrace, was not very large and in mere area was completely outdone by the more secular buildings which crowded the sacred Temenos. Upon the character of these a vivid light is thrown by the inscribed tablets found in the ruins, and fortunately, just as our plans of the site grow more complete and more complicated, tablets have turned up in far greater number. Apart from isolated finds, which are common enough, we have this season hit upon one small hoard of documents dating from the time of the Larsa kings (about 2000 B. C.) and a very large hoard, which indeed we have only started to unearth, dating from the last years of the Third Dynasty of Ur, about 2200 B. C., both series being business records of the Temple. As well as tithes, the God as landowner received either rent or a part share in the produce of the soil, and since money was unknown these were all paid in kind; and since the temple was also a fortress enormous quantities of food stuffs were stored within it, ready to meet the normal requirements of the temple staff but also to act as a reserve in case of war. For everything that was brought in a receipt was given, a little clay square carefully dated recording that so-and-so has paid in six pounds of butter of the best quality, so many bushels of barley, so much oil, sheep, cattle or what not; and every month a full balance sheet of all returns was drawn up with parallel columns shewing every farmer's contribution under separate headings. Just below the Ziggurat terrace there is a very large building exactly like the modern *khan* of the Near East, with a great courtyard surrounded by store rooms and with living quarters above its main gate; there is already some evidence for supposing that this was the Ga-nun-makh, the Great Storehouse, and it is easy to picture the countrymen driving in their donkeys laden with sacks of corn and piled baskets of cheese and butter and round-bottomed oil jars, crowding the courtyard, weighing and counting and disputing the tally, and going off at last with the clay receipt of which a duplicate had been duly filed by the chief clerk in his office over the gate. The Baghdad Customs House today must bear a very fair resemblance to the Great Storehouse of Ur four thousand years ago.

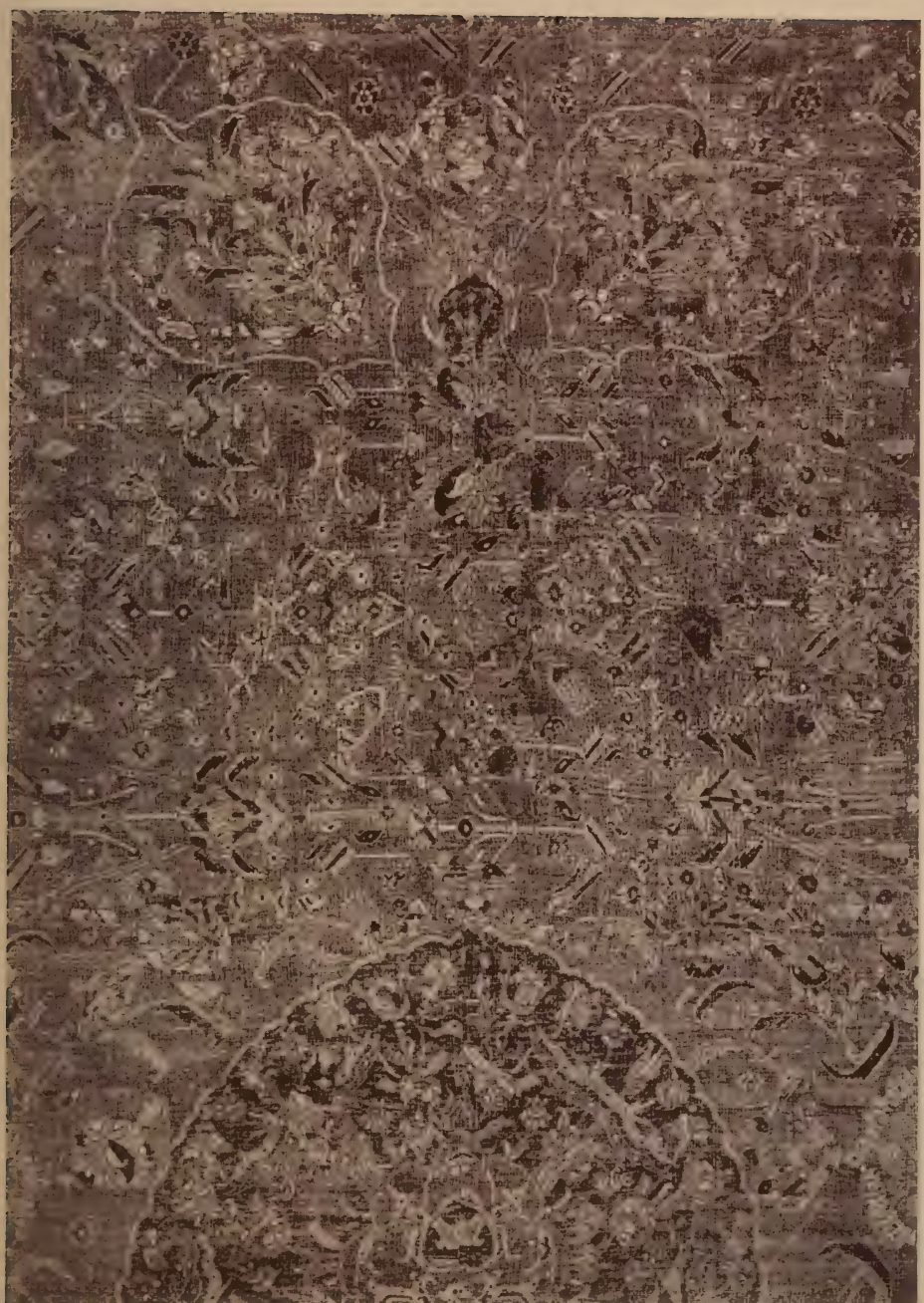
While the farmers and cowmen paid in country produce, the townsfolk used another currency; there are receipts for all sorts of

hides, for gold and silver from the jewellers, for copper from the smiths; and in one of the store chambers we find a furnace for melting copper, big jars full of copper scrap, and ingots of the metal presumably of some standard weight.

But if the revenues of the temple are carefully recorded, the outgoings are not less scrupulously checked, and these are just as illuminating for the life of the time. Naturally the temple officials drew their rations from the stores, and the issue vouchers were all preserved in the registry; every man had his regular allowance of foodstuffs, flour and oil, etc., for which he or his servants had to sign, and special issues were made in cases of sickness. But the most interesting records are those of the industrial side of the establishment. Numbers of women devotees were attached to the temple, and these were employed in regular factories; there were slaves similarly employed, and piecework was given out to others who had small workshops outside the temple precincts, and all these had to be supplied with the raw materials and with the food which was their wage. The main industry was weaving. In the building E-karzida alone 165 women and girls were kept at work, and we have the monthly and yearly accounts of the quantity of woollen thread supplied to each, and of the amount of cloth produced, each sort distinguished by quality and weight with due allowance for the wastage of thread in weaving. The rations are in proportion to the output, the older women receiving less than the young ones who would have larger appetites and could do better work, no more, in fact, than did the smallest children; thus if four pints of oil a day was the standard allowance for adults, children of different ages got two pints, one and a half or one, and the old women one also: for the sick there were special rates; if any one died, her name was kept on the books until the end of the financial year, but the date of death was recorded and an entry made against the name to the effect that thenceforward no rations were drawn! Temple servants sent on a journey were furnished with letters of credit enabling them to get supplies at the towns through which they passed. The whole system was thoroughly businesslike—cold bloodedly so, in fact—and it is hardly surprising that these servants sometimes ran away from their divine slave owner, so that we find letters issued for their extradition; but the records of it, which here I have very briefly summarised, have their dramatic side and wonderfully recreate the life which was led within the now ruined walls and courts of the Moon God's Temple.

FRAGMENT OF A MOSQUE CARPET

The famous Ardebil mosque carpet in the South Kensington Museum has made visitors to that Institution acquainted with the splendid products of the Sixteenth Century looms in Persia. Even fragments of rugs of the kind are extremely rare and precious. Such a fragment, measuring 5 feet 3 inches by 3 feet 9 inches was acquired recently by the Museum at a sale in New York and is here illustrated. The field is red and the design is woven in sapphire blue and in ivory tones.



A Portion of a Persian Mosque rug made at Isfahan in the 16th Century.

A PERSIAN METALLIC LUSTRE PLATE

The large size and beauty of this plate seem to indicate that it was made for ceremonial purposes. It is said to have been found at Hamadan, ancient Ecbatana, and was as usual broken. It is, however, unusually complete, only a few small fragments being missing. It is a product of the Thirteenth Century and a fine example of the beautiful lustred ware that was invented in Persia. In the centre is a medallion with two seated figures surrounded by a band of inscription. The body of the plate, the main field of decoration, is covered with a design made up of vine scrolls and birds. This important piece of Persian pottery which has recently been acquired by the Museum measures 20 inches in diameter.

Persian Plate of Lustre Ware found at Hamadan, Persia. Diam. 20 inches. Made in the 13th Century.

A LINK WITH THE OLD PEALE MUSEUM

By H. U. Hall

THREE years ago, in searching the accession book of the old Peale Museum, which is preserved among the Historical Society of Pennsylvania's collections of manuscripts, for entries relating to the ethnographical material formerly in the possession of that museum, I came upon an entry of quite another kind, which, as posing a curious psychological problem, and for the associations it evoked with an old tragedy as well as for the unconsciously ironic moral with which the story was tagged in the best style of old fashioned moralisings on horrible and excellent examples, seemed to me worthy of being better known. The recent death of Mr. John Cadwalader, an eighteenth century member of whose family was indirectly, and came within an ace of being immediately, involved in the tragedy, has made the present occasion seem a fitting one for publishing the story; the more so as another regretted member of the Museum Board, the late Mr. S. W. Colton, Jr., was connected by marriage with the family of the founder of the Peale or Philadelphia Museum and as one of the two principal actors in the drama belonged to a family a contemporary member of which, Mr. E. Marshall Scull, is now a member of the Board.

I am indebted for much interesting information concerning Charles Willson Peale and his museum to Mr. Horace Wells Sellers, a direct descendant of the artist, and to his nephew, Dr. Harold Sellers Colton, who has embodied a part of Mr. Sellers's treasure of information about the original Philadelphia Museum and its distinguished founder in a paper published in *The Popular Science Monthly* for September, 1909. Thanks are also due to Dr. T. L. Montgomery, Librarian of the Historical Society, for permission to publish the excerpts in question from the accession book of the Museum.

Before the days of specialized museums, these institutions were repositories of articles of an extremely miscellaneous nature, and it is therefore not surprising to find among the entries in the accession book such items of widely varying interest as, for example: "A Funeral Sermon Written and Preached by Arthur Jackson, Pastor of St. Michael's, Wood Street, London, Ano. Dom. 1641. Pr[esented] by Ph. Thickness Tuchett"; and preceding this at no great interval

occupied by various entries chiefly of a zoological interest, "The Finger of Mr. Broliman. . . ," which is the crux of our concern and which gives occasion to the writer of the brief history of Mr. Broliman which accompanies the entry to wind up his narrative with a tabloid sermon in a vein which would assuredly have delighted the heart of the amateur with the name of such curiously illusory Puritan flavour who so generously enriched the Museum with what must have been to him a most cherished treasure. For Wood Street is a mine for moralisers. "At the corner of Wood Street" Wordsworth hung a caged thrush which for the sentimental reflections it furnished him is almost worthy to rank with a more famous starling. There is no means that I know of of ascertaining whether Mr. Thickness Tuchett had read "Poor Susan"; but it is quite certain that the Reverend Arthur Jackson must have known that the church he preached in contained the burial of the head of the Scots monarch who fell at Flodden; that another, this one a Sassenach king, held court, by tradition, at the end of the street where now haberdashers rule; that the church of a colleague in the same thoroughfare, St. Alban's, was the traditional chapel of another still earlier ruler, and also the last resting place of one who was commemorated for his dire, even sans-culotte, poverty in a famous macaronic epitaph. Here are accidents, mortal to the mighty, and shining contrasts providentially ready to the tongue of the funerary orator. If prophetic vision of the tradesmen who might have contributed to the decent shrouding of Tom Short-hose and who now traffic in the razed courts of kings failed the Reverend Arthur Jackson, one feels certain that no compunctions about stealing the thunder of the incumbent of St. Alban's can have kept some sounding tropes on the vanity of kingly pomp and the echoes of the levelling tread of death out of the manuscript of the sermon preached in Wood Street nearly three hundred years ago. Death and haberdashers level all. This by the way.

The Philadelphia Museum of Charles Willson Peale was, considering its date and in spite of the inevitable burden of unsuitable material it had to carry, a real museum established and maintained at the expense on the part of its founder of what would otherwise have been, materially, a highly successful artistic career; for he devoted to its upkeep his considerable earnings as a talented portrait painter who had studied under Copley and West. His first interest was in natural history, and he made a noteworthy and not unsuccessful effort to present specimens in a manner which was

intended to combine a popular with a scientific interest. Founded in 1785, Peale's was the earliest museum, properly so called, in America, and in two important respects pointed the way to modern practice in the matter of the presentation of zoological specimens: these were associated with painted backgrounds illustrating the habitat of the living animals; and skins were not merely stuffed but were mounted on a wooden framework carved in imitation of the muscle covered bony structure of the beasts in question. If the institution could have survived in the form which he contemplated for it of a national museum, it would have embodied a not unworthy memorial to a man whose highest ambitions were those of service to his country, for which he bore arms, and to science, on whose behalf he sacrificed his own material welfare.

The passages which contain the story referred to are taken from the entries in Peale's accession book under the date January 31st, 1810. It will be seen that they embody two versions of the story which is attached to the gruesome relic "presented" to the Museum "by Mr. Plumstead in the year 1790, July," to quote the memorandum appended to the entry. The first version, ending with the words "desired he might be pardoned," omits mention of the name of Dr. Cadwalader, who is presumably the person there mentioned whom Bruliman refrained from killing because of the absence of witnesses. It is evidently taken from a newspaper account of the date September 4th, 1760. On this assumption the date of the execution of the murderer. "the 8th of October" must have been interpolated at the time when the entry was made in the accession book. An account which, with one important exception only, differs from the first version only in slight verbal changes, is quoted in an article clipped from a newspaper and stuck on to a blank page following the text of a little book which is to be found in the library of the Historical Society, entitled "Genealogical Notes Relating to the Family of Scull." This is a compilation of G. D. Scull, privately printed in 1876. The newspaper in question is apparently the *Sunday Dispatch.* The date, August 2d, appears on the clipping without the year, which, it will be seen, is probably one not earlier than 1876. The article is by G. D. S[cull], and the account in question is cited from *The Gentleman's Magazine.* The exception referred to consists in the insertion of the following passage, introducing the name of Dr. Cadwalader: "He then went out and met Dr. Cadwalader, who spoke to him so politely that it quite turned him from his purpose

against him." This sentence takes the place of the passage in the Peale accession book beginning with the words "He then went alone . . ." and ending ". . . he let the man pass." *The* (Philadelphia) *Gentleman's Magazine* was not founded until a date many years later than the commission of the crime and considerably later than the date of the entry in the accession book. The versions, therefore, contained in the entry are both much nearer in time to the event; the second version is copied "from the Old Catalogue," and is presumably of the same date as that of the donation of the relic by Plumstead, July, 1790. Plumstead's interest in the story must have been immediate, since the relic was in his possession, and, his evidence, which is responsible for the earlier introduction of Dr. Cadwalader's name, is as nearly first-hand as the documents available supply; besides which it has the circumstantial picturesqueness which one would naturally expect from an early account of an event which must have made no small stir in a small community, and was no doubt an almost literal report of testimony heard in court. The atricle by G. D. S. is entitled "The Scull Family of Pennsylvania," and it enables us to confirm the Christian name, Robert, of the Scull of Peale and Plumstead. The Dr. Cadwalader in question may be further particularized as Thomas Cadwalader. He lives before us in the few terse phrases of the old manuscript, a genial, courteous, and lively personality, whose pleasant address was an expression of a cordial spirit behind it, genuine enough to disarm a desperate man whose mind was charged with the gloom of a fatal purpose as his gun was already charged with the fate of another innocent instrument of his own ultimate and foreseen destruction. The entrance of the Doctor involves an example of dramatic irony that would have delighted the heart of Dickens or Shakespeare. It is truly dramatic in arising so naturally and inevitably out of the visible circumstances, ironic in the greeting unconsciously prophetic, in circumstances ostensibly trivial and indifferent, of a tragic dénoument. "What sport?" What quarry?—rather. One the farthest from your cheerful and unsuspicious thoughts: yourself even; or one of the careless pliers of cues over there at the Centre House across the commons.

The passages which follow are quoted verbatim from the manuscript, presumably written by Peale, with a few changes in spelling and punctuation only. The name of the murderer-suicide appears in two different forms. The account attributed by G. D. S. to *The Gentleman's Magazine* gives a third, Bruluman.

Philadelphia, Sept. 4, 1760.

1810, Jan. 31.—On Wednesday, August 27th, Mr. Robert Scull of this place, with some company, was playing at Billiards, when one Mr. Bruliman, lately an officer in the Royal American Regment, was present; who, without the least provocation, levelled a loaded gun he had with him, and shot Mr. Scull through the body as he was going to strike his ball, for which he was afterwards tried and on the 8th of October executed. He was by trade a silversmith; which business he left and went into the army, where he was an officer in the Royal American Regiment, but was discharged on being detected in counterfeiting, or writing[1] counterfeit money. He then returned to Philadelphia, and growing insupportable to himself and yet being unwilling to put an end to his life, he determined upon the commission of some crime for which he might get hanged by the law. Having formed his design, he loaded his gun with a brace of balls and asked his landlord to go a-shooting with him, intending to murder him before his return; but his landlord, not choosing to go, escaped the danger. He then went alone and on the way met a man, whom he was about to kill, but, recollecting that there was no witness to prove him guilty, he let the man pass. He then went to a public house, where he drank some liquor; and, hearing people at billiards in a room above stairs, he went up and sat down with them and was talkative, facetious, and seemingly good humoured. After some time he called to the landlord and desired him to hang up the gun. Mr. Scull, who was at play, having struck his antagonist's ball into one of the pockets, Bruliman said to him: "Sir, you are a good marksman and now I'll show you a fine stroke." He immediately levelled his piece and took aim at Mr. Scull, who imagined him in jest, and shot the balls through his body. He then went up to Mr. Scull, who did not expire nor lose his senses till a considerable time after, and said to him: "Sir, I have no malice against you, for I never saw you before; but I was determined to kill somebody that I might be hanged, and you happen to be the man—and you are a very likely young man. I am sorry for your misfortune." Mr. Scull had time to send for his friends and make his will. He forgave his murderer and, if it could be done, desired he might be pardoned.

The following is taken from the Old Catalogue:[2] 471 is The

[1] *The Gentleman's Magazine* has "uttering," which may be a gloss intended to secure conformity to the legal usage of terms.

[2] These are the words which, in the MS., precede version No. 2.

Finger of Mr. Broliman, a provincial officer in the British Service in the war before the last.[1] He was executed at Philadelphia for the murder of a Mr. Scull. This unfortunate gentleman became weary of life.

In this temper of mind he one morning rose earlier than usual and walked out upon the commons of this city with his fusee in hand, determined to shoot the first person he should meet.

The first person he saw was a pretty young girl, whose beauty disarmed him. The next person presented was the late Dr. Cadwalader. The Doctor bowing politely to Mr. Broliman, who, though unknown to him, had the garb of a gentleman, accosted him with, "Good morning, Sir. What sport?" The officer answered the Doctor very civilly and was so struck with his gentlemanly manners and pleasing address that he forebore to execute his desperate resolution. Impelled, however, by the same gloominess of disposition which actuated him when he first set out, [he] repaired to the Centre House, where some gentlemen were engaged at billiards. The sack of one of the players happening to strike his hat, the wretched man, eager for an opportunity of accomplishing his desire to leave the world, instantly shot Mr. Scull, one of the company, who died of the wound.

This little story offers a striking proof, that amiableness and politeness of manners are not only pleasing but useful in our commerce with the world.

Presented [i. e. the finger]
by Mr. Plumstead in the
year 1790, July.

If the writer of these entries had been a fair minded person he could hardly have failed to observe that a pretty face also is not only pleasing, but useful in our commerce with the world. The irony that attends the dramatic interest of the story has already been referred to. The inherent sarcasm of the whole situation comes out with no less force like the ghastly humour that identifies the motive of the murder with the function of the law.

[1] This, having originally been written in 1790, presumably on the information of Mr. Plumstead, the donor of the relic, refers to the American extension of the Seven Years' War.

FORM OF BEQUEST

I give and bequeath to the Trustees of the University of Pennsylvania the sum of .....dollars, in trust for the uses of the University Museum. (Here, if desired, specify in detail the purposes.)

SPECIAL NOTICE

In order that The University Museum may give appropriate recognition to the substantial gifts which have been already received, and which will hereafter be donated or bequeathed for the development of its resources and the extension of its usefulness, the Board of Managers have adopted the following classification for contributors and members, and have resolved that the names of the donors of aggregate sums of $25,000 and upwards, in cash, securities, or property shall be inscribed upon a suitable tablet or tablets, to be properly displayed in the Museum.

There shall be five classes of Contributors designated as follows:

Benefactors,	who shall have contributed the equivalent of					$50,000
Associate Benefactors,	"	"	"	"	"	" 25,000
Patrons,	"	"	"	"	"	" 10,000
Associate Patrons,	"	"	"	"	"	" 5,000
Fellows,	"	"	"	"	"	" 1,000

There shall be four classes of Members designated as follows:

Life Members,	who shall contribute		$500	
Contributing Members,	"	"	100	annually
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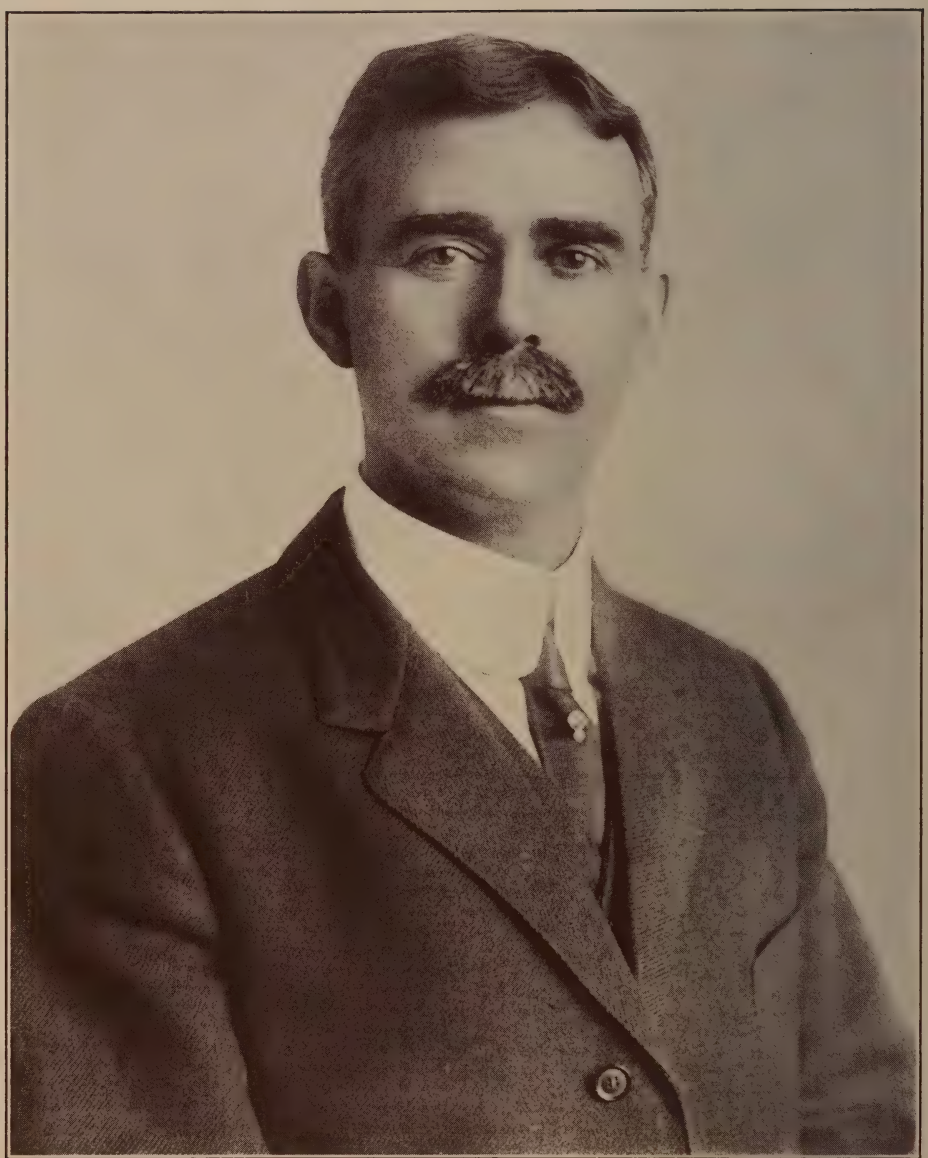

Dr. William Curtis Farabee.

THE
MUSEUM JOURNAL

Vol. XVI PHILADELPHIA, JUNE, 1925 No. 2

DR. WILLIAM CURTIS FARABEE

DR. WILLIAM CURTIS FARABEE died at Washington, Pennsylvania, on June 24th and was buried in the cemetery there on the 26th.

Dr. Farabee's illness had been a long one, beginning in June, 1922, when he suffered a severe illness while conducting excavations in the interior of southern Peru, whither he had gone on behalf of the Museum and where his health was exposed to some hazard.

Dr. Farabee was appointed in 1913 Curator of the Section of American Archaeology and Ethnology in the University Museum, a position which he held until the time of his death. Shortly after his appointment he proceeded to South America in charge of the University Museum Amazon Expedition, an undertaking that was to test to the utmost his physical endurance and courage. From that expedition he returned to the Museum in 1916, having explored a large area in southern British Guiana and in northern Brazil as well as some of the little known areas to the south of the Amazon. He also penetrated to the headwaters of that river and ascended the Rio Negro, the Rio Branco and the Rio Uraracuera into Venezuelan territory. Before returning home, he conducted a series of remarkable excavations on the island of Marajo in the mouth of the Amazon River and explored certain ancient caves on the mainland two hundred miles north of the river at its mouth.

The results of this expedition were important in many respects, but undoubtedly the outstanding and the most remarkable of these results were the investigations conducted among the forest tribes in northern Brazil and southern British Guiana. These tribes of Arawak and Carib stock were almost unknown and some of them had not before been visited by white men. In company with Mr. John Ogilvie, Dr. Farabee penetrated to the heart of British Guiana where only Humboldt had preceded him. After being lost in the

wilderness for months and after severe hardships, the party emerged on the coast by way of the Corentyne River, emaciated by fever and almost overcome with fatigue. After six weeks of recuperation on the island of Barbadoes, Dr. Farabee returned to South America and resumed his work in the unexplored wilderness of Brazil south of the Amazon and to complete the work of the expedition by an excursion to the head of the Amazon and finally to undertake the explorations at the mouth of that river already mentioned. The extent of the territory covered will alone serve to indicate the energy and activity displayed by Dr. Farabee on this expedition, but to realize the importance of his results it is necessary to glance at the collections in the University Museum obtained from the many tribes visited and from the excavations made.

As a result of the Amazon Expedition, Dr. Farabee completed two volumes of reports, one The Central Arawaks and the other The Central Caribs, both of which were published by the University Museum.

In 1922 the Museum sent an expedition to southern Peru and Dr. Farabee again took charge of the South American work. While conducting explorations in the Nasca country in the interior of southern Peru, he was attacked by fever and by inflammatory dysentery. Realizing the danger of his situation, he set out alone to reach the coast and to seek medical aid. He broke down completely on the way and the journey ended in an Indian's hut where he was nursed by the native family until their messengers could reach the coast and bring the necessary aid to save his life. He was then carried to a hacienda where civilized comforts and scientific treatment and his own great physical strength restored him slowly to a semblance of health. To complete his cure, it was decided that he should go to Arequipa where the high mountain air would invigorate his exhausted system. The experiment was not entirely satisfactory in its results and he was taken to the island of Juan Fernandez. In spite of every effort, Dr. Farabee began to realize that he was no longer able to undergo the severe hardships that his projected explorations entailed and after making a journey among the Araucanian Indians of Chile, he returned to Philadelphia by way of the Argentine and Rio Janeiro, arriving here in the spring of 1923. He then underwent medical examination and the doctors pronounced their verdict that he had pernicious anemia. After a course of treatment at the hospital which afforded little encouragement either to himself or to

the medical profession, he went to a farm in West Virginia and lived out of doors. In the winter of the same year, he removed to his old home in Washington, Pennsylvania. Treatment by means of blood transfusions, though it undoubtedly had the effect of prolonging his life, did not enable the patient to regain his strength nor brighten the outlook for a return of health. His death was therefore not unexpected by his family and friends, though for a long time his iron strength of will and courage raised false hopes among the many who found it hard to be reconciled to the true situation.

During the period when Dr. Farabee was Curator of the Section of American Archaeology and Ethnology in the University Museum, he received many honours and distinctions. Among them were the gold medal of the Philadelphia Geographical Society and the gold medal of the Explorers Club of New York. He was selected as a member of the delegation of experts that accompanied President Wilson to the Peace Conference in Paris and he was chosen by the American Government to represent the United States at the celebration of the one hundredth anniversary of Peruvian independence in Lima.

Before entering the service of the University Museum in 1913, Dr. Farabee had already conducted a three year exploration in South America as leader of the Harvard-DeMilhau Expedition. At an earlier period he had made a journey across the central desert of Iceland during a summer vacation when he was an instructor in anthropology at Harvard University.

Dr. Farabee combined the qualities of ripe scholarship with a magnetic personality, a kindly disposition and the buoyancy of youth. He won friends readily and held them firmly wherever he went. It is not easy to recall any man of science who was personally so well liked, who had so few enemies and so many friends.

The collections obtained by Dr. Farabee represent the following living Arawak and Carib tribes: Apalaii, Waiwai, Parukutu, Macusi, Wapisiana, Ataroi. These are tribes in northern Brazil and southern British Guiana; on the Tapajos River south of the Amazon, the Mundurucu; at the headwaters of the Amazon, in Peru and in Ecuador, Huitoto, Conebo, Shipibo, Cashipobo and Yahua.

The collections of ancient decorated pottery obtained from the excavations on the island of Marajo are unequalled in extent and in variety of interest, and those obtained from the anciently inhabited caves north of the river are otherwise unknown.

The later expedition to southern Peru resulted in the acquisition of a collection representing the ancient arts of the Nasca Indians, including their beautiful weavings and also their painted pottery. There were also obtained a number of Inca and Pre Inca collections. The South American collections in the Museum consequently have been greatly enriched by Dr. Farabee's labours and the additional knowledge obtained by him has been of the very first importance.

The following books and articles by Dr. Farabee have been published by the University Museum.

THE CENTRAL ARAWAKS, 1918
THE CENTRAL CARIBS, 1924
ANCIENT GOLD TREASURE FROM SOUTH AMERICA, CENTRAL AMERICA AND MEXICO, 1920
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MUMMIFIED JIVARO HEADS, MUSEUM JOURNAL X, 4
ANCIENT AMERICAN GOLD, MUSEUM JOURNAL XI, 1
A NEWLY ACQUIRED WAMPUM BELT, MUSEUM JOURNAL XI, 1
INDIAN CRADLES, MUSEUM JOURNAL XI, 4
THE USE OF METALS IN PREHISTORIC AMERICA, MUSEUM JOURNAL XII, 1
A GOLDEN HOARD FROM ECUADOR, MUSEUM JOURNAL XII, 1
EXPLORATIONS AT THE MOUTH OF THE AMAZON, MUSEUM JOURNAL XII, 3
DRESS AMONG PLAINS INDIAN WOMEN, MUSEUM JOURNAL XII, 4
RECENT DISCOVERY OF ANCIENT WAMPUM BELTS, MUSEUM JOURNAL XIII, 1

THE JOINT EXPEDITION TO UR OF THE CHALDEES

By Leon Legrain

AS I leave Marseille on the SS. Lotus on October 1, 1924, a sharp north wind, which they call "lou mistral," puts white crests on the blue waves. The parting view along the bay is lovely: Notre Dame de la Garde, the green pines of the Prado and Corniche, the grey rocky islands, If, Pomegue and Ratoneau. The passengers are a fine mixture of Egyptians, Jews, Levantines, three French officers and their wives, and a few lost British subjects. A crescent silver moon hangs over the dark blue sea.

The air is warmer near Corsica. How lonely seem the small villages in their green dales. Cretans, Phoenicians, Greeks settled here centuries ago. How many oriental types are on board: dark massy hair, curved noses, long eyelids, prominent cheekbones, round cheeks and fat necks, gazelle eyes glossy and disquieting, thin or full sensuous lips for love and lie. Many a silk scarf of bright color is tied about the dark hair like the ancient "Syriaca coppa."

There are distant lightnings over the Italian Coast, and the air is stifling in the straits of Messina but the stars have never been so bright over our heads. I break the ice and talk across the table to the dark French lady with the gold spider jewel from Madagascar. She is in business in Alexandria but she hails from Coutance in Normandy. There seems to be a colony of Normans—and many pilots—in Alexandria, Port Said and along the canal, and also in Algeria. The restless rovers who took Normandy, England and Sicily feel at home on the high seas. The lady's husband escaped shipwreck, but spent seven hours in the water, after his boat had been torpedoed during the war. Beyrout then was a base for German submarines. Many supposed neutrals used wireless in their favor and laid mines in the canal. Why they never blocked it is still a wonder. Alexandria was visited by enemy planes. Egyptians were at first friendly toward Germany.

Alexandria has a very flat shore and a poor line of white buildings about the harbour. The landing affords the first contact with the oriental life, color, smell and dirt. Long shirts and red tarbouches crowd the "sûqs" or markets of meat, fish, eggs and vegetables. An

A Street in Baghdad.

oily, greasy smell permeates the whole atmosphere. Past Mehemet-Ali place and Twefik Pasha street, the quays and walks along the northern shore are a great improvement. They are decorated with green Egyptian flags bearing a white crescent and three stars; there are lines of electric lights, two triumphal arches and one large tent carpeted and hung with glass lustres in the best oriental taste. Tomorrow is the anniversary of King Fuad's coronation. I hear some Missionaries pray: thank God for the British rule. The day they leave the place, we leave it too. A large immigration of Greeks and Armenians has increased the population and doubled the rents. Rules and restrictions have been passed. But the country does not suffer, for it is rich and has plenty of gold. King Fuad and his suite drive briskly past me on their way to the palace of Ras ed Din. He is well spoken of as peaceful, intelligent and interested in education.

East of the city the gardens of Nusha with their purple flowers and their running water under lofty palm trees are a first unveiling of oriental beauty. Bunches of dates, still hanging on the trees, are wrapped in red bags to preserve them from birds and flies. Sharp pointed Egyptian barges glide on the low water of muddy canals. They are loaded with green and gold fruit, and pale yellow earthenware. Light dust rises like puffed incense under each step as I walk back to the ship. A Greek boat with a diver is fishing waste coal at the bottom of the harbour just alongside our liner. These scavengers reclaim over a ton a day.

Port Said at the entrance of the canal stretches in a glaring sun, a long front of houses. Most of them are built with porches in the Eastern style. Over ten thousand passengers leave in May and June every year in quest of the northern breezes of the Lebanon mountains and come back in October. The Syrian Mandate under French control is divided into four states, two on the eastern shore of the Mediterranean and two inland, Damascus and Aleppo. The Pashas and local lords have lost a good deal of their absolute power and oppressive taxes. The great problem is the capture and distribution of water to irrigate the land and supply large cities. Tapping the main pipe for private use is a common form of abuse. Aleppo district has three crops a year, two of maize and one of barley. Wine and olive oil are abundant. A sheepskin sells for five Syrian franks. There are great opportunities and great gambling. They even play poker in Aleppo. Mounted meharis, planes and automobiles control effectively the desert by land and by air.

In Beyrout hotels have sprung up and the prices are real Syrian. The Paris decolleté mode prevails. Many automobiles are offered for sale. Fords are in great demand. The village grandees like to parade in a car before their admiring peasants. Even before reaching the Syrian capital all kinds of rumors are floating over the blue waves as I pass along the white coast of Palestine and the famous cities, Jaffa, Haïfa, Tyre, Sidon. There is in Bagdad a well known lady, a great Arabic scholar, whose code address is Ancient Bagdad. The welfare of the Arabs is her consuming care. Basra is quite a new city since the war, with quays, large buildings and good roads. But the land from Bagdad to Mosul is still infested with brigands. Such is the daily gossip. The Chatelaine du Liban, the last book of P. Benoit, is another bone of contention. Everybody objects to the hero being an officer and a traitor. If the treason is not an actual fact in the book, it is owing to the intervention of General G. An officer sent to the north frontier near the Beilan pass tells me that he feels lonely and would much prefer Africa and the Tchad region where there is real life for a colonial with fifty porters and twenty-seven days track from Brazzaville. Recruiting men for the East is a hard problem. As soon as they have been there long enough and have adapted themselves to the Oriental life and manners they seem to be good for nothing else. A captain of tirailleurs says: "Know the human motor. Respect the Moslems who observe Hamadan. Do not force them to work on Beiram day. Be just to them and have an iron rule, attend to their physical needs and diseases. They will kiss your hand and tell you: 'You are my father.' Beware of the Marabu, the religious fanatic."

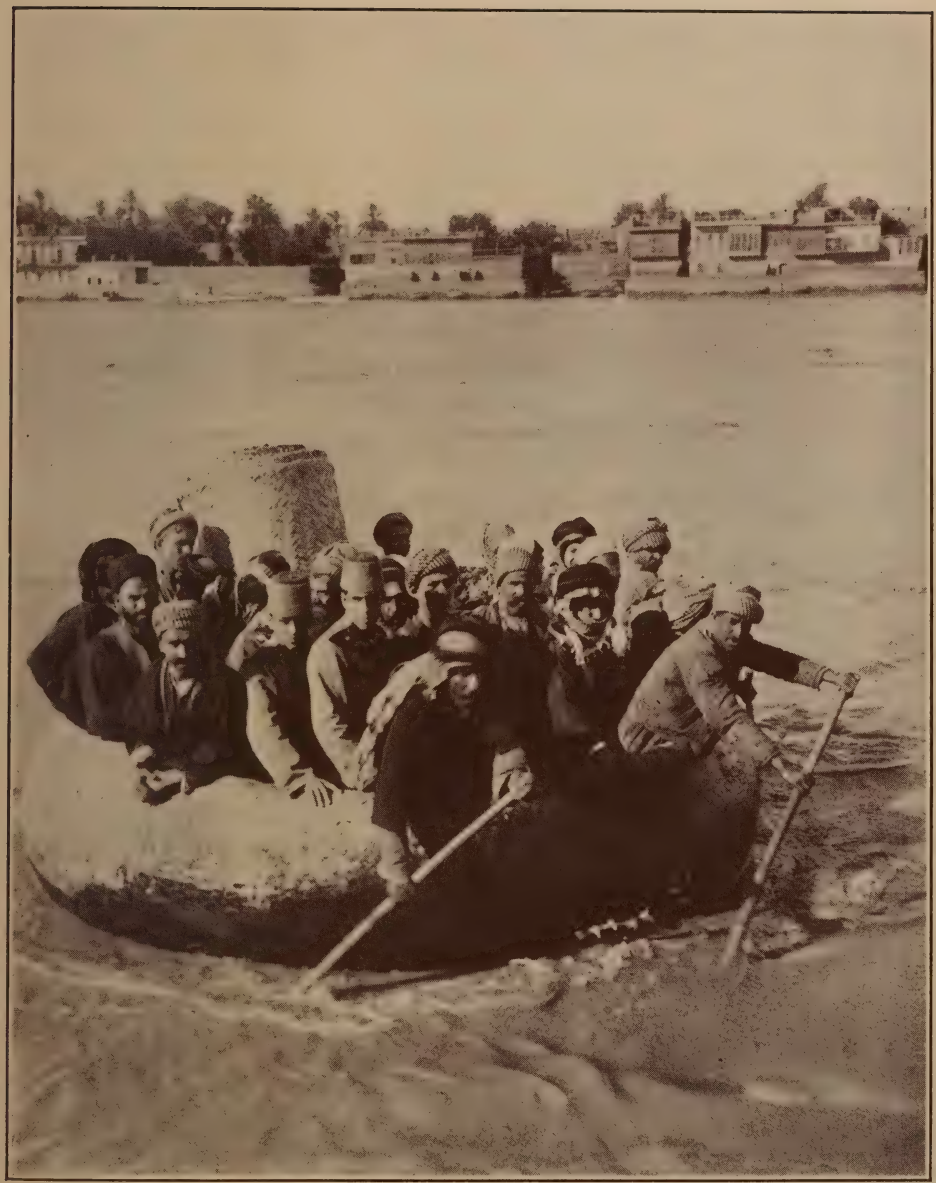
Palmyra in the desert already attracts many tourists. It lies in solitude within seven hours from Damascus by automobile. A new large hotel is contemplated. Next to the ruins, the great attraction is the famous sheikh, kidnapped in his younger days by a Parisian lady, but now restored to his desert and duties. On the south a good road connects Damascus with Banias at the springs of the Jordan river.

Beyrout is connected with Bagdad by several automobile lines. One of them leads you to Bagdad in thirty-six hours of continuous riding, by day and night, through Damascus and eight hundred miles of desert. It is run by Mr. N. Nairn, an enthusiastic and efficient New Zealander. We leave Beyrout and the blue shore and the West with some expectation of a new adventure. Five passen-

Building a Kuffa, the native boat built of wattle and daubed with pitch.

gers, we are in a good Cadillac, our full pack cases and trunks strapped on the sides. We carry a water tank filled for five days, and a pile of native flat bread in case of an emergency. Our driver is Mr. Reed, Scotch and wiry and a good shot. Full speed we go, over the Lebanon pass, in a clear fine morning. We pass barren mountains, whitish lime rocks, creeping vines, and barley fields, rich happy villages, the brown fertile Baalbek plain. The modern road recuts the older camel track, till, over the Anti-Lebanon, along rushing water and lines of green poplar trees, it reaches the fat and open oasis of Damascus. It is marvelous to see our automobile, bulging over with all kinds of boxes and bags, push its way through narrow crowded streets, amid loaded donkeys and camels, arabyas and veiled women, fat pashas and screaming boys, in an atmosphere of oily roasted things.

We leave the city, the orchards, the fields, even the road, and stop finally on the threshold of the desert. Two Michelin posts point solemnly toward Bagdad, eight hundred miles away. The silence is impressive. The desert has the beauty of the ocean, made of infinite lines with a wonderful display of colors, only broken by one distant line of camels and at night a few dangling lights of an Arab camp. The track is a good clay soil and stones, with perfectly smooth patches over which the car will run at a speed of sixty-five miles per hour. The mark of the wheels is distinct on the ground and will persist several years. Right and left empty petrol cans line the track and give a white glare in the night when hit by our lights. A few wrecked cars bespeak the dangers of the desert. We pass two stranded ones awaiting rescue, just like ships lost at sea. One of them has been five days waiting. We are glad to carry water and bread to help them and stop at intervals in the immensity for a short tea, lunch and dinner. It is good sport following game in a fast car. Our driver kills a bustard turkey and misses a pair of foxes and a desert hare. At three o'clock in the morning we try to capture two white gazelles. The graceful animals, from a safe distance turn toward us wondering eyes. Satisfied with the good sport we wish them good-bye and a free life. In the cold blue light, before sunrise, half an hour's rest stretched on the bare ground is a sheer necessity for cramped muscles. Before reaching the Euphrates we pass the camp of Sheikh Tagh Bey, a rich owner of over 30,000 camels which he sells from Egypt to Persia.



At Baghdad. Crossing the Tigris in a Kuffa.

How welcome the green lines of palm trees which mark the approach of the Euphrates. The stony desert changes to dust and mud cliffs, a natural shelter for wild pigeons and sand grouse. The first rains in Harrar have increased the volume of the water. The boat bridge at Feluja is the best suggestion for a reconstruction of the ark of Noah. The rough pieces of wood which outline the shape of each boat are protected by reed mattings thickly bedaubed with bitumen to prevent it from sinking at once. Why that wretched looking, badly patched bridge should resist the current is still unexplained. In fact it has been broken and mended many a time. Feluja is a poor looking mass of mud houses which we leave in a cloud of dust. Mud and dust eternal, mud seems to be the burden of the land, the Mesopotamia between the two rivers Euphrates and Tigris. The first brick tower of Tell Ibrahim rises over the broken high banks of ancient canals, over the smooth mud plain, till our eyes, weary of so much dust, rest with delight on the green palm gardens of Bagdad. The avenue leading to the Maude bridge has been freshly spread, Arabs with crossed legs are leisurely drinking coffee and smoking cigarettes, while looking with passive eyes on the modern caravan escaped from the desert.

Bagdad's best hotel is a very relative thing. I look around the room while an Armenian boy brings in the early cup of tea and hot water. Rug on mud floor, electrical fan, curtain in front of a badly closing window, a poor divan and a washstand.

Outside a couple of natives move solemnly up and down the wooden staircase carrying on their heads corbfulls of mud plaster to repair the roof. The hotel boasts a first class American bar and a band of Russian musicians. There is a pealing of bells from some Christian church.

A two horse arabana, or a good automobile, will take you over the bridges and the main roads well enough so long as the rain does not change the dust to mud. Or you may float down stream. A boat with two good rowers, good cushions and a light tent above your head is quite pleasant. Up stream the boatman pulls on the rope from the shore, his bare feet biting in the soft mud.

I am informed that The Hon. Miss Gertrude Bell will receive at tea time. A most original and great lady, a kind and passionate archaeologist, good judge of men and of some archaeologists. My way leads through the Arab garden with flower beds surrounded by mud drains for running water, to the quiet house of the famous lady.

I forget the long journey of the desert and bless the discrete charm of this beautiful garden in Old Bagdad.

The coppersmith's bazaar full of the noise of the hammers beating the red and yellow metal is a most enticing place. You need no magic carpet, no crystal eye, to be transported to the glorious home of Harun. Just step aside to let pass that donkey heavily loaded and the bare feet of the rider seated on the rear of his mount, try to discover a dry spot on the greasy floor and watch the six dark devils hammering in cadence a large disk of metal, red hot from the furnace.

The gilded copper tiles and the blue faience on the domes of the Khadhimin, the mosque of the two sufferers, attract the eyes of the traveller from afar. Most obliging and erudite Mr. R. S. Cooke of the Awqaf proves an ideal guide. We respectfully stand outside of the gates and of the bronze chains barring the entrance to all non Moslems. But even from a distance we can enjoy the perspective of the court, the colonnades copying the old Persian Apadana, and the gaudy colors of the tiles. The bazaars, hammam, opium den are more accessible. But, above all, a blessing on the head of the imam who entertained us at a wonderful Arab dinner of some fourteen courses: soup, chicken roasted and boiled, sausages of lamb, roasted lamb, potatoes, fried eggs, red and green stuffed peppers, creamed lupines, sweet dishes, rice, dates, sweet dates, melon, grapes, apples preserved in honey, pickles, soda water, buttermilk and coffee. A very full meal indeed.

We finish the day in a palm garden, a grove of date palms and orange trees and cabbages. The new bridge across the Tigris being unfinished, we float across in a guffa, the round basket boat of willow branches and bitumen. Two Arabs paddling right and left try to keep the silly whirling thing in an approximate straight course. The palms have reconciled me with the low muddy land.

Bagdad's shrines of fretted gold
High walled gardens green and old.

A palm grove surrounds the new Arab University, a fine building of yellow bricks designed by Major J. Wilson. Plain round arches combine with decorative pointed arches below a long straight line of Cufic inscriptions. Only a wing is achieved, but its sober grace and sense of tradition are quite pleasant. The sun is low when we call at the Moslem College for a short visit, a quiet rest in the garden,

The Tigris at Baghdad.

a cigarette, a cup of coffee. The white headed wise man of the East who presides over its destinies, introduces us with a refined kindliness to all the teachers of his staff, and sees us to the door thrusting into our hands little nosegays of sweet smelling flowers.

Passengers for Ur Junction leave Bagdad by the night train which has good sleepers and a dining car. The wind is sharp and two blankets are not too much to keep us warm on our leather couches. We pass in deep night the historic fields of Babylon and cross by day the Euphrates at Samâwa on a pile bridge. A new steel bridge is being built and the approaches show welcome signs of activity. A new junction leads toward the sacred city of Nejef and Kerbela, and being well patronized by the Persian and Indian pilgrims promises to pay for itself. We detrain at Ur Junction at 5.45 P. M. We spy from the station the low mound of Tell El Obeid and the venerable ziggurat of Ur, a great feature above the immense line of the desert. An Arab delegation of our guards, servants, foremen, Hummudi, Halil and the rest of them is waiting for us. Great kissing of hands, salaams and invocations of Allah. All baggage is taken down, counted, lifted on head and shoulders, and in great style we start on foot for the camp two miles away. The ziggurat is marking our direction toward the south. There we will spend the winter and try our luck at deciphering ancient history buried in dust and the oblivion of centuries.

Our camp is an eighteen room house built in twenty one days with old bricks of kings Nabonidus, Nebuchadnezzar and other worthies of Ur whose stamped bricks are scattered about the whole ruin. Barbed wires and a ditch surround it. There is an entrance, a court, two wings, a small porch, a central hall or dining room leading to bed rooms, office, drawing office, storage rooms, workshops, dark room, kitchen, servants' quarters. A ladder leads to the crenellated top of the guards' room. Everything is brick and mud. Brick walls, brick floor laid in mud mortar. The roof is mud with chopped straw, laid on reed matting supported by round rafters. Reed matting on the floor and one open fire place smoking either way: in or out. Mud plaster with yellow coating gives a warm aspect to the dining room. There is a book case with two rows of books, scientific research books and novels. Everything would be so cosy, except for the white ants, the mice, the mosquitoes, flies and sand flies. The white ants eat the books, the mice eat the cake and jam, the mosquitoes and sand flies eat us, and the flies are a common

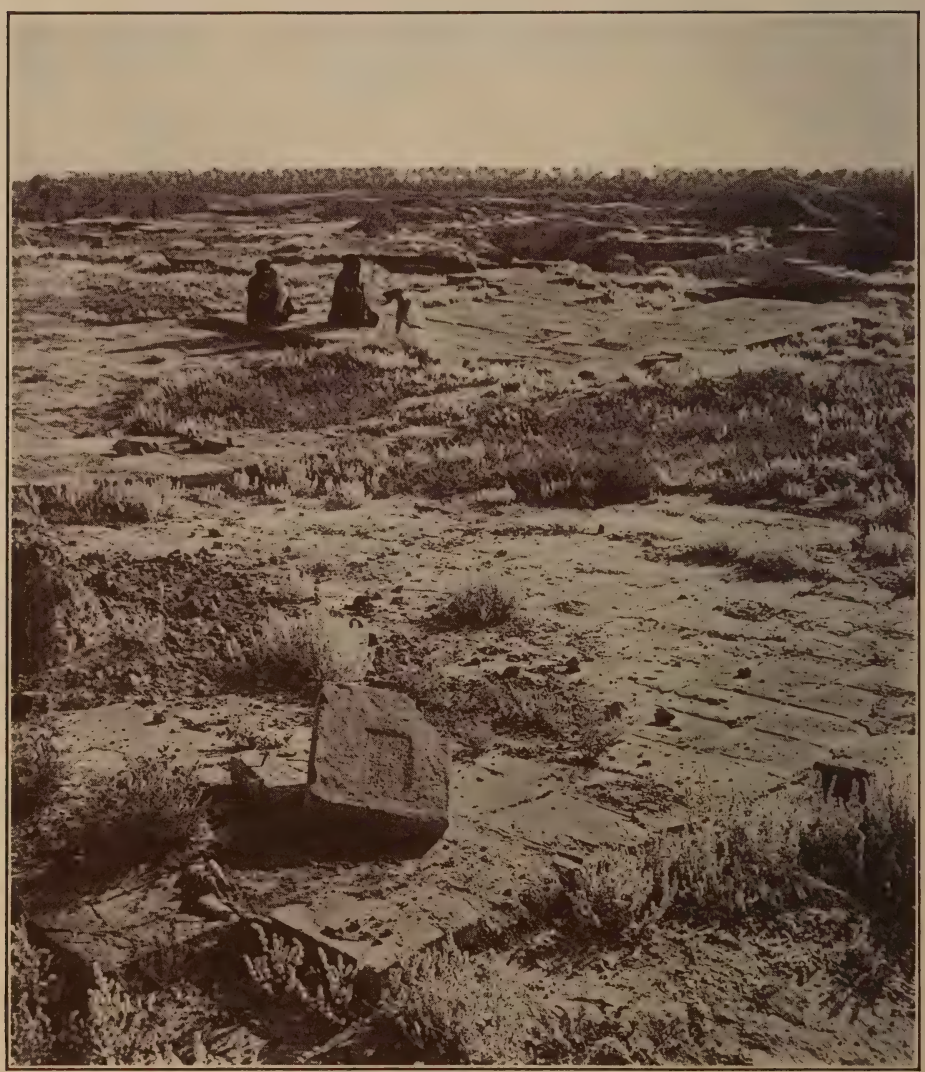
A Jewish Marketplace. Baghdad.

nuisance. Wire netting is still an undreamed of luxury and we eat armed each with a fly killer. There is absolutely no water in the place, no tree, no grass. Every day a transport corps of four donkeys carrying four cans of water each arrive from the station and refill iron water tanks; they will bring water to the porous open pointed jars from which the diggers will quench their thirst. Even the station has no water. Every day a water train brings the drinkable water with addition of chlorine from the next small town, Nasarih on the Euphrates some ten miles from the station.

We are lost deep in the desert, in the impressive silence of the immensity around us, over which an unrestrained wind sweeps at intervals like a strong ocean breeze. Are the omens favorable? The crescent moon and the evening star shine silver clear in a deep blue sky. The song of the old Sumerian worshipper comes back to our mind; "O Father Nannar, brilliant, young, Bull of Heaven, when thy horn shines over the horizon."

From five in the morning great lines of Arabs are seen marching with their long steps across the desert toward our camp. Noisily chattering they assemble and squat down outside the barbed wires. Today is the labor fair, when men will be enlisted for the dig and their names put down in the book. This is the great business of the day. How the news spreads, without wire or wireless, for miles and miles, is a mystery of the desert. But here they are, the huddled crowd, making passionate appeals toward the foremen to have their names written down in the famous book of the elect. Pickmen first, heads of the gangs, spademen and basket men, their aid will be listed in turn. Older workmen have a privilege, and their certificate from the last year sells like a bond on the market. Our chief of the expedition is standing in the middle of the magic circle out of which Hammudi, the foreman, is chasing the intruders with an expressive gesture and one energetic "barra," and forcing them to sit down again. When both are impossible we break up the meeting and walk majestically out. They will sit there and hang on like flies the whole day long and come again the next morning.

We begin to unpack. The old "tumbril," an exservice Ford which has seen many campaigns and was discarded after the war as unfit, runs to the station to bring more goods and a visitor. How its parts hold together is a mystery. It has a nickname among the Arabs at the station like the "Ruin" or the "Calamity." With some repairs, a new chauffeur and a few artistic touches it will make good



The Pavements of Babylon.

to the end and deliver safely twenty four boxes of antiquities to their further destination.

Our camp is within the limits of the old city and we reach it from the plain through a gate of the ruined wall. That wall is only traced by a slow surging of the ground. But its different coloration and the numerous bricks and fragments scattered on the surface are enough to distinguish the oval of the city from the surrounding desert. Rain and ages have deeply ravined the different quarters inside. A main cut East West may have been a canal. I take a solitary walk over the whole field. Fine dust and broken pottery, pieces of bitumen and bricks, fragments of clay sarcophagi, a few bits of stone are the only things visible on the surface. How much is buried below?

Within the city, excavations have been limited to the sacred area, the temple of the Moon God. They may last ten years. A double wall pierced by six gates surrounds the temple. Within the large enclosure there are many houses, shrines, storehouses, a house of the Moon God, a house of his wife, a treasury, a palace of the high priestess, houses for the commandant of the guards, for the keeper of the archives, all kinds of depots of grain, oil, wool. The big brick tower resting on its own terrace in the N. W. corner of the sacred area is, since the tower of Babel, one of the most popular features of a Mesopotamian temple. With true archaeological feeling I climb the hoary pile on the hundred brick steps laid by king Nabonidus. He only repaired it and the core is much older, some 2400 B. C. The view from the top at sunset is a revelation. Over that immense flat country the huge brick construction is really a mountain, worthy of the temple of a capital city.

Far south another brick tower raises its dilapidated head above the gray sand of the desert. It marks the site of the sister city Eridu-Abusharein, the abode of Ea, God of Wisdom, ruler of the deep abyss. On the east a thin green line of palm trees traces the course of the Euphrates. Since the war, the black thread of the railway gives a sense and life to this dead land and connects it with two poles of civilization: Bagdad and Basra. What pain and labor will remove the veil of sand and dust which has crept over the ruined city and reveal its ancient features?

The sunset today is glorious. The sky is ablaze with liquid gold with touches of pink and pale green, below a long distant luminous line of grey and snow white clouds. The blackening face

of the earth and the slow undulating ground of the ruined city are stamped forever as Ur of the Chaldees by the dark purple silhouette of the Ziggurat. A fine collection of water colors would alone do justice to the desert.

Day by day and for months our life will be filled with the infinite drudgery of excavation; a section of the temenos wall, the first bricks with finger print or a stamp, a pavement broken in the middle by a big sewer composed of jars one on top of another, small rooms, round granaries, door sockets, stray clay cones with inscription, calcinated pieces of palm tree, small base or altar, blocks of limestone. The architect will survey the ground and draw the plan of all the remaining constructions. I will copy the inscriptions in the field or at home in camp, if only flies and mosquitoes will give me some rest. They bite fiercely. My hands are unshapely. That pest is satisfied during the week to feed on the Arabs working in the trenches, but Sunday, as the work stops, and for want of a better food, they all fly back to our camp and take possession of every room. We fight them in vain, only to add to our misery till night comes and sends them to rest. Our last resource is to sleep out of doors in the open air.

Saturday is pay day. The whole tribe of the Arab workmen seem possessed of a sudden frenzy, or are they on the war path for plunder and murder? They rush from the dig toward the camp shouting and dancing, brandishing their spades, a formidable looking troop. Their leader throws up a short burden which they all take up stamping their feet in cadence on the bare ground. Some have untie their headdresses for mere joy or excitement, unveiling long tresses or close shaven heads. Their eyes grow wild and perfectly hysterical. Near the camp they form in a wheel or circle and the dust flies beneath their pounding feet. A table and three seats have been laid on the open for the head of the expedition and the two native foremen. Nickel and silver coins and five rupees notes resting in soup plates are on the table. One armed guard, gun in hand, is squatting by. The tribe forms in a circle, sitting down with crossed legs. A relative silence is maintained and the famous book of names is brought forth as I presume it will be in the last judgment. One by one each man is called, coupled by the name of his father in the old Oriental way. Shalomo ibn Daud. One by one each man stands up, answering na'am, yes, present, and approaches to receive in his hand the price of his labour. Contestation or arguments are debated and settled in public assembly. One by one each man retires, or

Ruins of Babylon.

sits down again, carefully counting his gains, or paying off his debts in this Arab stock exchange.

We picnic today in a palm garden on the bank of the Euphrates. Our host is our agent in the market town of Nasariah. His brother is our servant, and his mother, a decent old lady, keeps a cow—our daily supply of fresh milk—in a tent outside the camp. This might be the Garden of Eden. Tall palms spread their shade over orange trees and creeping vines. The ground below is divided into squares by small mud canals, where the tepid, nourishing water spreads leisurely, flooding them one by one and bringing abundance. Lettuces, onions, beans, lents, aromatic herbs grow luxuriant and rank. Batteries of shadufs, worked by bulls moving up and down an incline, or a water wheel worked by an old horse, raises the water from the river into the upper basin.

Brightly colored shawls hung between the rugged trunks of the palm trees afford the privacy of a closet. Rugs cover the mud ground. Thick blue cushions are spread on them for us to rest and smoke and enjoy a glass of soda before lunch. Queer Arab figures and little boys with untidy hair and dirty shirts pop around. Chairs and a table occupy the centre of the place and are more suitable for our Western dignity than the Arab custom of picking your food from a dish laid on the ground. We fare richly: fish, stuffed eggplant, boiled chicken and lady fingers, roasted mutton and rice, more chicken, mutton and rice, cucumber salad and sweet cookery. Coffee, soda and three stars cognac. It is a genuine hospitality in which our host takes a pride: "When my enemies hear that the English have lunched in my garden they will burst with jealousy."

A line of willows and a mud bank separate the garden from the river. We sit under the shade of the trees and contemplate in silence the ancient Euphrates, the river of Babylon. Two belams sail up stream with a good wind and glide swiftly past us. Across the water a battery of shadufs work with a long creaking whining complaint. The dull drumming and the plaintive melody of Arab song arises in the distance. Why not in a garden when the eve is cool? While we are returning to the camp the light has changed to a delicate violet and mauve. The old Ziggurat stands gloriously, a black shadow in an ideal pale greenish blue and vanishing emerald.

The morning brings good news. A torso, minus a head, of an old Semite, cut in a green stone has come out of the ground. His name is Dada-ilum, carefully engraved on his shoulder. He becomes at

A bit of the Walls of Babylon.

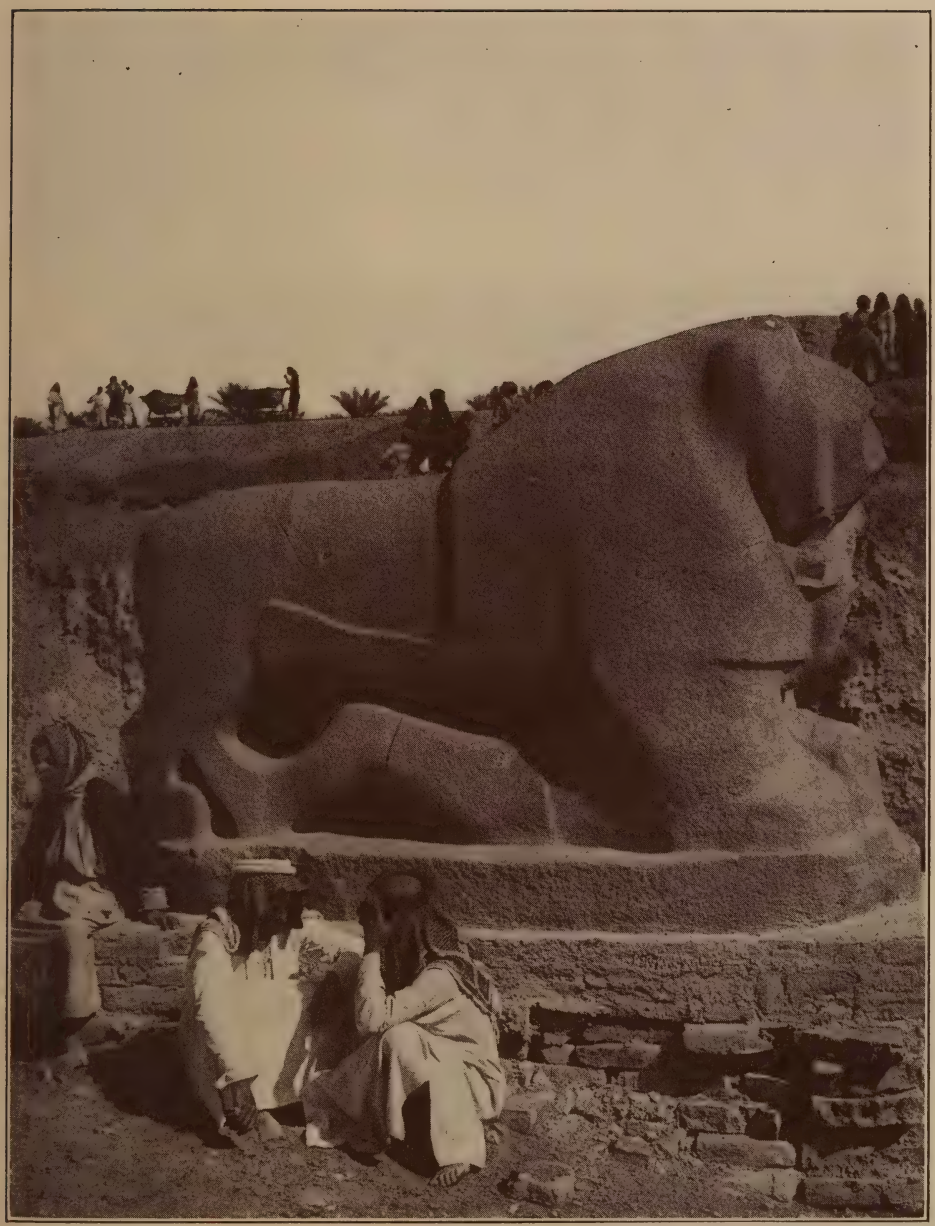
once popular among the workmen. Ducks and wild geese in V formation pass screaming over head bound for the South, foreboding the winter and the rainy season. Christmas is made merry by seven visitors from Bagdad, a cake and a bottle of champagne. The cold wind sets in and we cluster around a poor fire of wood, charcoal and bitumen. A party of our visitors prefers to climb the old tower, or to wander across the cuts and lanes of the old city, in quest of Abraham's house. the king's palace, the house of the priestess, trying to locate across the desert dust clouds, the dead and mysterious Eridu. The end of the year has come. How much still is buried underground? But hope immortal still remains and we look ahead for the coming year and the big discovery.

The joys of an assyriologist are pure. Running from trench to trench over the field, brushing an old stone, leaning down to decipher a brick of Nebuchadnezzar badly placed in the pavement and returning home to pile more bitumen on the fire, brush more tablets, and read an incantation against the evil eye newly recovered from the threshold of a shrine, who would not envy such a life?

Despite the January rain, work starts again with the whole crowd of shivering Arabs digging and carrying away the dirt in their small baskets. It means for the evenings a number of sore toes, cut fingers, sore throats and other minor ailments which must be attended to in the camp. Two white tablets to cut the fever, two black ones for the stomach. The confidence of our workmen is unlimited. They would gladly bring their whole family to the camp dispensary if they were allowed.

It has rained all the night, and the unwelcome rain has leaked through the mud roof, and spoiled several good plan sheets. Outside it has changed the desert into a liquid quagmire. But this is the last effort of the winter, and a few days later on a clear spring morning, we receive, not the first swallows, but a party of six visitors touring the world under the guidance of the missionary, Dr. Grenfell of Labrador.

This morning we open the furnace in which the inscribed mud tablets have been baked for twenty four hours into hard bricks. When discovered in the ruins of the priestesses house, the tablets were just soft mud. Worms had passed through them without any resistance. They crumbled in the hands that tried to lift them from the surrounding compact clay. One by one complete tablets or fragments had to be packed in dry sand in empty oil cans, and the



The Lion of Babylon.

cans placed in a larger Arab oven. The furnace is simply a mud tower, open above, with a brick grate and a vent below. Cans and fuel, wood and crude oil are disposed of by pouring inside, and fire set to the whole pile. When the flames are blazing clear an iron lid is clamped on, leaving only three holes for ventilation below the joint, and a heavy mud coating is spread on the top. The fire is left to smoulder and to give a moderate and continuous heat. Next will come the opening of the furnace, the extraction of the tablet from the hot sand, the brushing, mending, pasting together of all the complete tablets and fragments, and later the reading and copying of all good examples. They fill tray after tray and build on the ledge a respectable line. They are full of details about the temple slaves, the weavers, the bakers, the storing of cloth, copper, gold, silver, the housing of farm products, the unloading of pack animals and boats, the keeping of accounts. Dozens of officials are mentioned by name, the commandant, the messengers, the shepherds, the cowherds the keeper of the orchards, all attached to the temple. This must have been a lively place. The big long rooms were full of grains, barley and other cereals, oil, dates, milk, butter, wool, stored under the protection of the god. Round the brick tower, stronghold and last defense of the inhabitants, were accumulated all the requisites of life. A deep well was sunk in the court of the inner temple. A wall surrounding temple and tower ran at the level of the lower terrace.

Outside of the temple limits a deep depression almost level with the plain is perhaps a water basin connecting the temple, through canals, with the great river. Stone, timber, bitumen wanted for the construction, would float in this way, and the boats of Magan would in return export skins, wool, cloth, dates and barley. How many years will elapse before the buried history emerges completely through the thick cover of mud and bricks?

Sitting on a hill of mud and debris, I am looking north toward the newly excavated building, the Dublal shrine, court of justice and house of the priestess. Behind it, the central staircase of the old Ziggurat cuts a deep black shadow. The panelled walls of Dublal rise with austere lightness above the panelled terrace. With their poor materials the Sumerian builders constructed on large and powerful lines. Thick walls, well laid courts, buttresses and terraces, receding stages and gates guarded by towers, give an impression of force made more striking by the flatness of the country. The

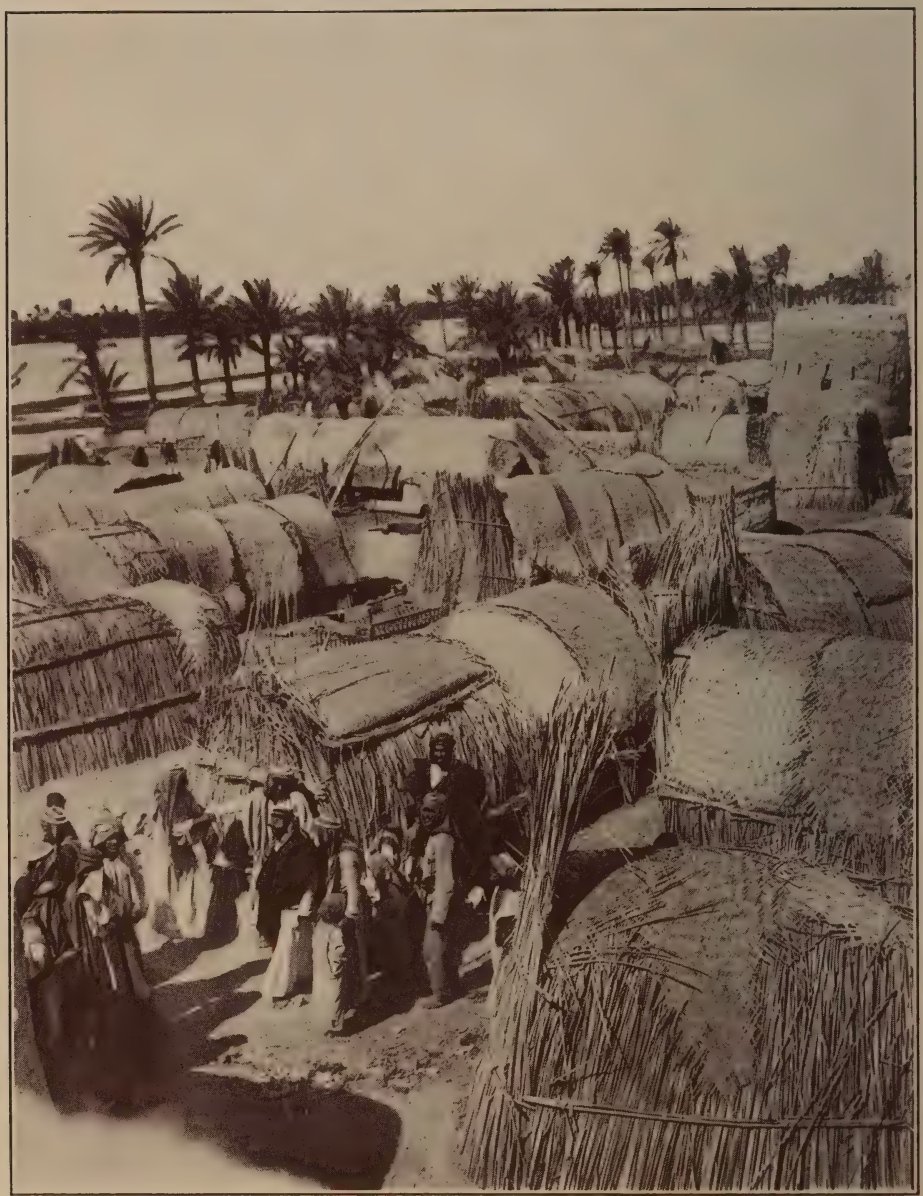
horizon today is a lovely clear golden line of desert. Who can tell the beauty of the desert at noon, its splendid and infinite lightness?

In the afternoon a strong wind begins to sweep the plain and to raise clouds of fine dust. Sun, ruins and tower disappear in a gray mist. The wind does not abate but keeps its masterly sweep like an ocean gale. Dust covers the paper on which I attempt to draw the central stairs of the Ziggurat, that ladder of Jacob reaching unto heaven. Better to give it up and to work in camp.

The wind is very cold. No coolies on the work today. The place is so dead without them. How calm is the whole field. Only two visitors are found wandering in the trenches. One of larger proportions is the president of a Manchester Cotton Manufacturers' Association. He is quite interested in the old ruin, but refuses to climb the crumbling steps of the tower. He shows the keenest interest in our collection of antiquities and promises to send from Basra a bale of cotton for packing. Our fire is kept alive with coal and gîr, the Arab name of the bitumen, which we extract from below the pavements, and between the layers of bricks, and which makes a passable fuel. Old King Ur-Nammu never dreamt that we should bless him for it some four thousand years later.

End of February. Our visitors from Nasariah, the political officer, the canal engineer, are surprised at the progress of the digging. The pile of débris next to the Ziggurat is gone for good. The view of the Ziggurat rising from a level platform is imposing, and most properly towering above the Dublal, the shrine of the Moon God. The best discovery of this year has been made in the court between. It is the broken fragments of the stela erected by Ur-Nammu, the founder of the Ziggurat as a memorial. The king himself is here represented as the first bricklayer of the land, carrying on his shoulders the instruments of the trade and led in state by his personal God to place the corner brick. The benediction of the God on his land for the good deed. Graceful girlish figures slide down from heaven carrying in their hands an overflowing ampulla, symbol of rain. Other registers show the building of the Ziggurat, the bull and lamb sacrifices, the big drum band playing its ritual tunes, herds of fat cattle passing in a landscape of rank growing reeds.

We take one day off to visit Eridu or Abu-Sharein in the desert. It is a cold, dreary day. The sand keeps flying in a sharp wind, blurring the whole landscape. Four mounted policemen have been dispatched ahead of our two Ford cars to prevent any surprise. The

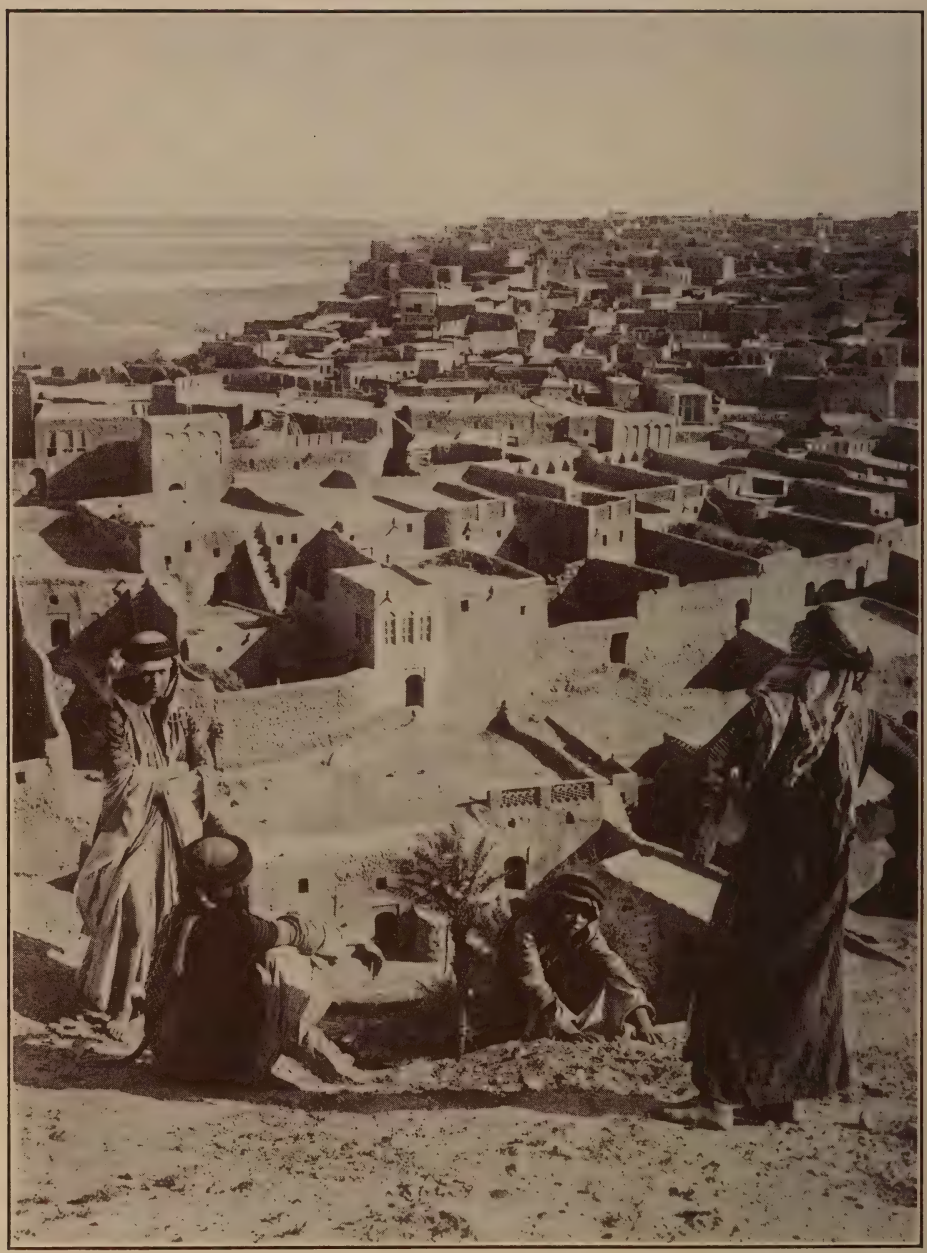


A Village on the Euphrates.

remains of the brick tower of Eridu seems higher than the Mugajjar Ziggurat. Stamps of king Bur-Sin are seen on every brick scattered around. The flight of stone steps leading to the top is nearly all gone. The deep hollow at the foot of the steps marks perhaps the location of the apsu, a sacred water basin. Prehistoric pottery and flints are found all over the place and also blocks of porphyry, basalt, bluish stone, green diorite and aragonite. The walls round the small city are comparatively well preserved. A few mud houses are still standing, their windows, door and even painting on the wall are still visible, and afford a welcome shelter. The whole place clustering round its high tower over five thousand years old has a strange air of an enclosed holy city, rich and narrow, old and dead.

The mayor of Nasariah, a picturesque Ras el Beled and his followers have come to see the ruins. Under their eyes the workmen uncover poor old dead bones in a tub shaped coffin. The body lies on one side with the knees tucked up. At the feet there are a graceful copper vase and a copper bowl turned green with oxyde. One slender arm has still its copper bracelet and rests between two small round enamelled vases. One finger has a copper ring with a gold plate. By the size of the bones this must have been the body of a young girl buried in the ruins of the Moon God one or two centuries before Christ. Round her neck they have placed a string of beads, gold and carnelian and chalcedony, lying now in the dust below. There she has slept over two thousand years, till her poor belongings should be collected to enrich a Museum.

The end of the season has come. Sheikh Monchey rides to our camp for a last visit and even a cup of tea. We part good friends. Our foremen are leaving ahead of us on their way back to their native Jerablus on the Euphrates in Syria, and we partake of a last cup of Arab coffee. Even the old Arab lady, the keeper of the cow, has tears in her eyes. The wild crowd of coolies has gone after a last dancing of thankfulness and joy on the last pay day. All our visitors have dispersed, on foot, in automobiles, even in an infamous two horse "Victoria" all patched with strings and wire. The last to go are four good Americans from New York and Ohio, following in Abraham's footsteps. They are shown the whole field starting at the top of the Ziggurat and finishing at the supposed Abraham's house. The old gentleman, who is nearing seventy-nine years of age, leads the train, passing trenches, climbing up and down, and taking pictures. I take a few pencil sketches of the Ziggurat, the great



Tikrit on the Tigris.

court, the Dublal, the newly uncovered building, as a means of goodbye. Shall we ever pass again the same track?

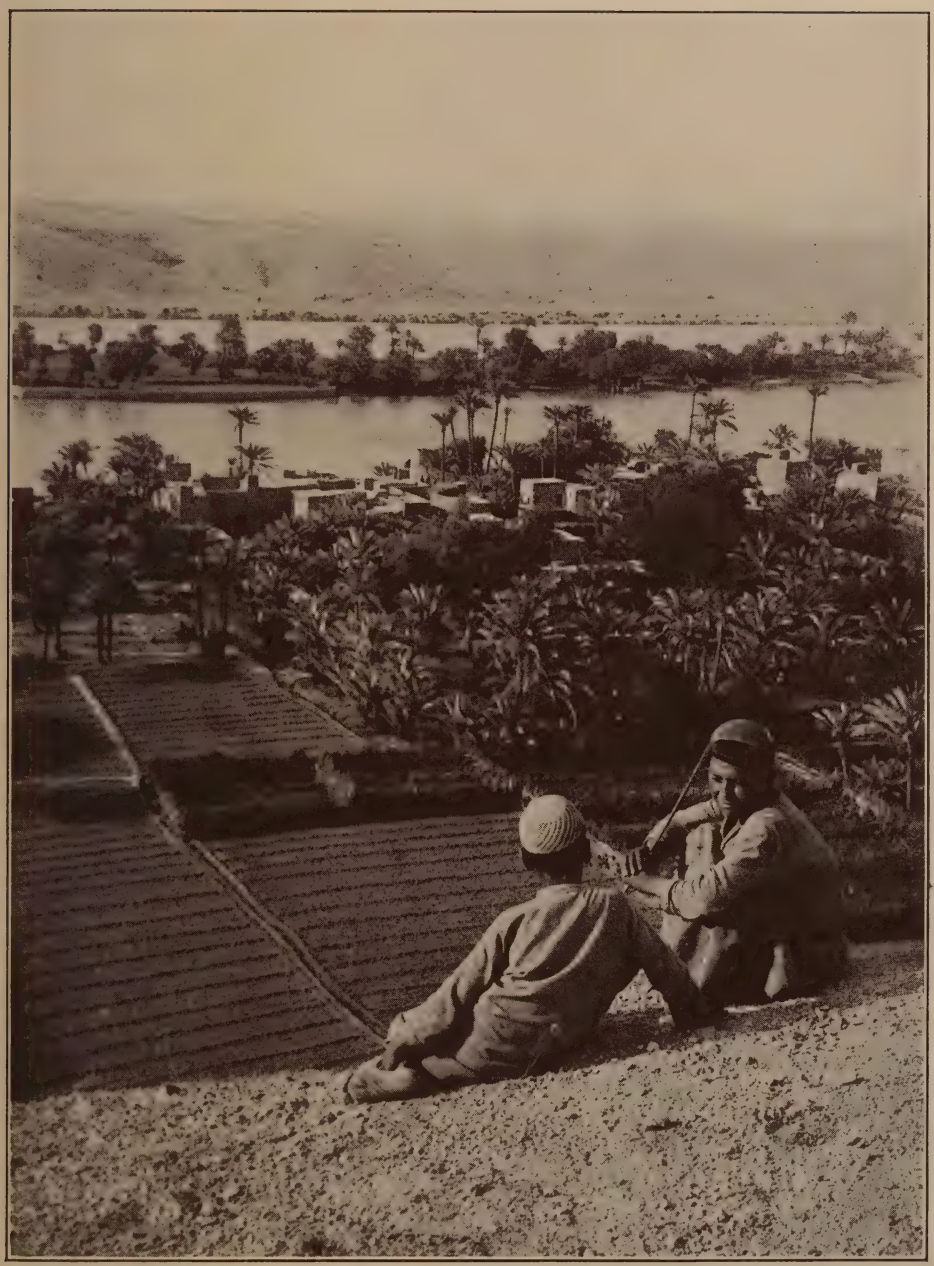
The great packing activity is over. All boxes are sent to the station. I take a quiet walk to the excavation field. All is silence. There is a purple violet line over the desert and dead Abusharein. One by one the memories of the past are being recalled. On this very pavement priests and priestesses and votaries used to walk going to the shrine to bring their morning and evening offerings, drawing water from the deep well, pouring the libation in front of the shrine of Nannar. The Elamites and the Babylonians in turn destroyed it, plundered its treasuries of gold, silver and precious stones and left it a desolate place. The canal silted up and filled with sand. The desert slowly replaced life and reigned supreme.

Our camp house is closed with two nails fixed in the door. All books are in a tin box on a table for fear of the white ants, all the bedding in another large box raised on four bricks off the floor. The luggage is already at the station. Guards and servants come to wish us goodbye and kiss our hands. The Ziggurat of Ur of the Chaldees is fading in a mirage over the horizon. Stormy clouds are slowly accumulating. We pass the first green fields, which are a real delight for eyes accustomed to the gray solitude of the desert. We have three berths and a dining car. We wish to stop that night at Hillah and visit Kish and Babylon. But the oncoming storm and the pouring rain make it a sheer impossibility. Sky and earth are confounded in a continuous dull line of yellow watery muddy mist and mire. How well do I understand the feeling of Noah in the ark when God came and closed the door behind him. Only the frogs are happy and keep singing. Wet black forms of Arabs pass rapidly, their abayehs dripping with rain, their brown legs deep in mud.

Bagdad is given to two sorts of passions, politics and archaeology. There were even some good dinners and dancing. A member of the Commission of the League of Nations actually operating in and round Mosul, has come down in a hurry and must fly back, because the Commission is short of cigars, which would prove fatal to the harmonious working of the Commission. The work itself is simple enough, each native being asked three questions: Did you like the Turks? Do you like the Turks? Will you like the Turks? But this is mere gossip.

The river is rising, and its turbid rushing waters are quite impressive. They strain to the utmost the resistance of the pontoon

The Belam on the Euphrates. The Belam is built of many rough Pieces of Wood lashed together and Coated with Pitch.



A Garden on the Euphrates near Babylon.

bridges. No one is allowed to cross. All the guards are on watch. I have to trust a belam and two strong boatmen to carry me over the violent muddy current in order to reach the east bank. The old citadel is worth a visit, but unfortunately is in ruinous condition. It may become the possible site of the Archaeological Museum. What is left of the brick work cut and chiselled out of pale yellow brick is very remarkable. No architectural motive but the decorative effect of a huge carpet pattern worked into the brick arch. The beecomb effect in the corners add their touch of airiness. There are scanty but precious examples of the bygone glory of Bagdad. Stained glass windows and painted ceilings in musty old houses encumbered and dishonored by pedlars, retail dealers and their goods may be seen. The Mustansir, the old city college, is now the custom house. We piously visit it inside and outside. Inside we have to climb piles of cotton bales to admire ancient vaults and ceilings, outside we rest awhile drinking coffee in front of a magnificent cufic inscription boldly cut in the stone walls of the college, and decorating the whole front. The coffee man has built his charcoal furnace against it and the smoke has blackened the inscription. The whole day he will boil the black mixture in his brass pots, while customers with crossed legs on high wooden divans inhale the smoke from their nargilehs, or keep humming to the music of a native guitar. One of the bazaars opens alongside the coffee house. It is occupied by the slippers merchants. Hundreds of red slippers hang gaily in the sun. Steamboats, barges, belams press against the quay, seeking refuge from the violent current. A motley crowd pass unceasingly: Arabs, Kurdes, Persians, Jews, Syrians, Armenians, English residents, Indians, the confusing mixing of languages, answering the long ringing murmurs of the frenzied waters.

Two secretaries of the League of Nations are back on the wing from Mosul and report some good news. Count T. was safely delivered with his cigar boxes, his energy triumphing over the inconveniences of an air transport. The day is hot, and we enjoy spending the afternoon in a sweet scented Arabian garden close to the Khadhimin. The alleys are made dark with palm and orange trees in blossom. Running waters add to the coolness. The old gentleman with the green turban is awaiting us in front of a small white pavilion not unlike a shrine. What a dream of Oriental life. A long table is overloaded with all sorts of fruit: oranges, apples, preserved apples and plums, sweets and cookeries, almonds, cigarettes. Soft drinks,

Ur of the Chaldees. Overlooking the desert from the top of the Ziggurat.

sodas and coffee are served abundantly. We will not touch the tenth part of those Oriental delights, expressing in their way the Oriental welcome: all that is mine is yours. Each guest is led by the hand to his place and promoted with honor when seeking to occupy the last.

We leave Bagdad and its ancient gardens, rolling over the mud track in a comfortable Studebaker with balloon tires, on our way to Mosul and Aleppo across the Syrian desert. The track follows the Bagdad railway on the west of the Tigris, passing the golden domes and the spiral tower of Samara, and shortly afterwards Tekrit. We wander across hills avoiding the flooded low ground. Chalk hills begin to rise and the soil is covered with stones and pebbles. Camels, sheep and goats are browsing the short grass of the pasture land. The Shammar Arabs come out of their black tents to wonder at our train. We give them the salaam and some cigarettes and are rewarded with the glorious remark that: "these must be kings." We climb the low range of the Assyrian hills, the Djebel Hamrin. The air is keener. Over the horizon looms the line of the Kurdish Mountains. Gypsum and melting clay cut deep gulleys, and muddy wadis afford anxious moments. The crossing of small rivers near the place where there was a bridge is a difficult problem with a driver desirous not to ruin a new car, and generally stopping in the middle of the stream to ascertain whether it is safe to proceed.

The black Ziggurat of Shergât, the old Assyrian capital, points toward our resting place, at the English camp where we receive a most kindly reception. By order of the C. O. a bridge of empty cans is built at early dawn over the river to facilitate our desert excursion to Hathra. A sheikh is our guide. We go merrily bumping over bridge, rail, green land, ford of gypsum blocks across the wadi, with a feeling of endless liberty. Not a single tree, but short grass over the billowy pasture land with a sporadic scattering of camels, sheep, goats and black tents. Far away in the misty distance, above the dark line of the Kurdish Mountains, snow capped peaks appear in the larger depressions. Blue flowers, anemonae, narcissus, tulpis peep out of the grass. Lines of dead camels brown swollen or dry, remind us of the ever present danger. Our valiant captain shoots a great bustard turkey, and plucks the black and white feathers growing like a ruffle round the neck. They will make a valuable present.

Alas we shall never see Hathra. The mud of a small wadi is enough to stop the big car. Three hours work, piling of stones and

dry grass and the use of a powerful jack is just enough not to rescue the Studebaker. If only it had been the miserable Ford. Well, we will spend the night in the ruins of Ashur, the high built nest of robbers. We are far from the motherly Sumerian city, all open and spreading in the plain. A steep strong wall follows the sharp sandstone ridge. The base of the wall is formed of blocks of stone supporting layers of hard baked bricks, above which the red dark Ziggurat is towering high. It is not easy to climb the crumbling slopes. The old Turkish kaleh overhanging the river eastward terminates the ridge. Its roof affords a splendid view over the Shergat plain reclaimed in the last years from its wildnerness, over the winding river, and the affluents cutting deep through the mud silting of the plain.

On the way to Mosul the late rains have carried away the bridge over a large wadi. We could ford it, but a road has to be cut in the steep bank on the other side. A division moving south on its way back to India, just arrives in time to repair the broken passage. But even then a careful driver has to take his chance. A full loaded wagon and four mules tumble over before our eyes, and land in the soft mud with small damage.

We are received in Mosul by Captain Sargon, the chief of the police, a great polo player and a most obliging host. The best of judges, while absent, has put his home and servants at our disposal. It is true Scotch and Oriental hospitality combined. The house is moreover one of the best Arab houses, built right on the river and looking from its loggia and upper terrace across the yellow Tigris toward the low mound of Nebi-Yunus. The tomb of the prophet is in the hands of Moslem worshipers, a trifle fanatical. For a small bakshish they will show it to us. The yellow and blue tiles are only a pleasing imitation of real tiles. The sword fish hanging on the wall is supposed to add to your conviction. Well informed people affirm that a Christian bishop by the name of Jonah was the origination of a well advertised pilgrimage which was turned into profit by the Moslems.

Mosul built in gray stone, the local soft alabaster, has a clean appearance, more pleasant than muddy Bagdad. There are still some good Arab houses, with paved courts, terraces, well built divans, porches, with famous grapes growing over spread osier frames, gazelles and red partridges running round ever bubbling fountains. But the comparatively modern city has little to show

Ur of the Chaldees. The Ziggurat before excavation.

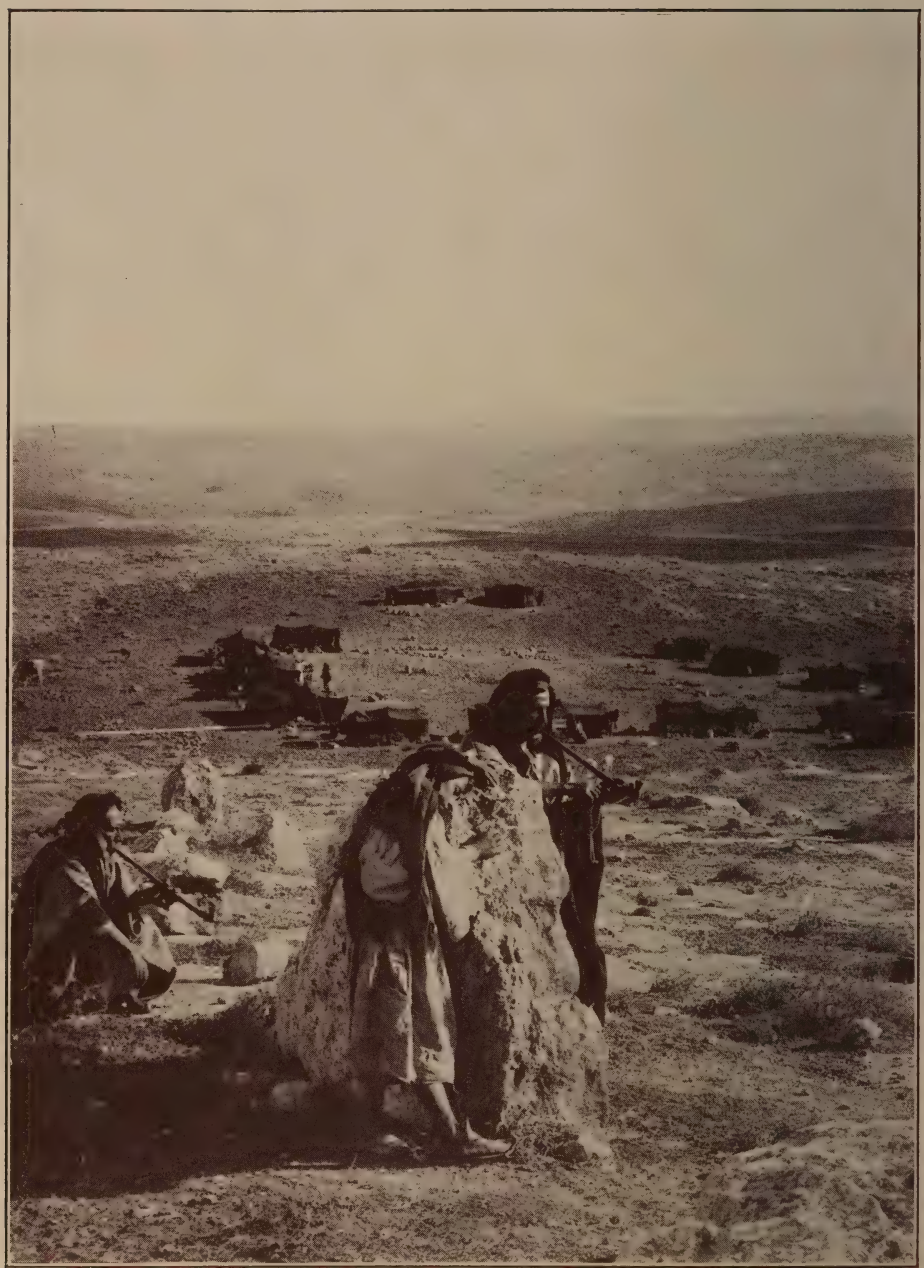
and its tradition cannot compare with the famous ruins of Nineveh, Nimrud, Khorsabad and Bavian.

I had a good ride with Captain G. of the Guides over the ruins of Nineveh. The old city is entirely underground. What shows above is only ploughed land, green grass and barley, with here and there a large sunken pit, the filling in of earlier trenches. Through fields, brush wood and shallow water we had quite an exciting time.

Nimrud is still the great field of Layard's excavation. Two swift cars bumping over the dry clay and gulleys of the road reach easily the green Ziggurat covered with grass and anemonae, a classical landmark on the high terrace. Many reliefs of winged lions and human headed genii, carved in soft grayish alabaster, cut through the turf, and half emerging from the ground, keep their solemn watch at the gates of Ashurnasirpal's palace. A colossal statue of Nabû is still buried up to the waist. The upper part, especially the head, is a target for Arab boys. Face and nose are badly damaged and disfigured. That many museums would be proud to possess such a monument of Assyrian art is the opinion of the League of Nations as expressed by the Commissioners who between times show their interest in archaeology.

We will cross the desert in three days from Mosul to Aleppo by Deir es Zor and the Euphrates. A police car opens the march with a couple of large wooden boards to help in crossing the bad wadis. Bridges have been built, but the heavy storm rains have washed the approaches to the bridges and left the piles of stone standing piteously alone in the middle of the depression. The muddy bottom has been since paved with stones, mostly borrowed from the bridge, to manage a rough crossing. The black Sinjâr hills form the northern limit of the green pasture land teeming with the cattle of the Shammars. These independent sons of the desert, with their noble features and merry laugh, are a wonderful sight, as they walk like kings in their great abayehs, one stick across their shoulders, surveying their lambs and ewes, black goats and camels.

The Suwwah khan will be our shelter for the night, after we have crossed the Khabur on a rough pontoon bridge. The poor rooms along the crumbling mud wall are probably infested with vermin. We will sleep in the open on rugs and the cushions of the cars. Cats and dogs, ants and black beetles, attracted by the light and the food, crowd about like an army marching with banners. At two in the morning a party of mounted police dismount and picket their horses



The Bedouin at Home.

in the court. Some of them get loose and keep stamping and shuffling around. At four the rain sets in.

We leave at six to reach Deir es Zor on the Euphrates. The bridge is broken. A coarse jointed barge or tender will ferry the two cars across. The weight is too great and the barge sticks in the mud. A number of half naked Arabs wade in and with clamorous invocations to Allah try to push the ungainly thing into deeper water. They expect a free passage as their reward. We pivot on the spot a good long while without being able to leave. That crossing will cost two hours of precious time. What a motley crowd, going to market and patiently waiting on the bank a chance to ferry across. There are really clear features and skins, some mongoloid eyes, blue garments and blue tattooes. Women wear a profusion of beads, silver jewels and rings in their noses. All bundles are carried on the head. Sheepskins, and fleece are among the common staples.

Deir es Zor in the French Mandate has a clean and comfortable aspect. There is a good bazaar and an English doctor. The enterprising wife of an Algerian officer sells sparkling Vouvray and "choux à la crême." We hear that valuable antiquities, Sumerian statues from Tello, have just passed through Deir es Zor, smuggled out of Iraq and on their way to the European and American markets.

The khan of Sabkha on a large bend of the Euphrates is our last stop before Aleppo. The keeper has brought us coffee and water and left us to our devices and contemplations in the bare upper rooms. A black mound marking the site of an old city alone breaks the long line of the desert. There is coarse brushwood on the peninsula formed by the bend of the river, and an orchard with lemon and orange trees on this side at our feet. A flight of rooks plays over the waters in the evening, and cuts the air with rapid wings, with the sound of rustling silk.

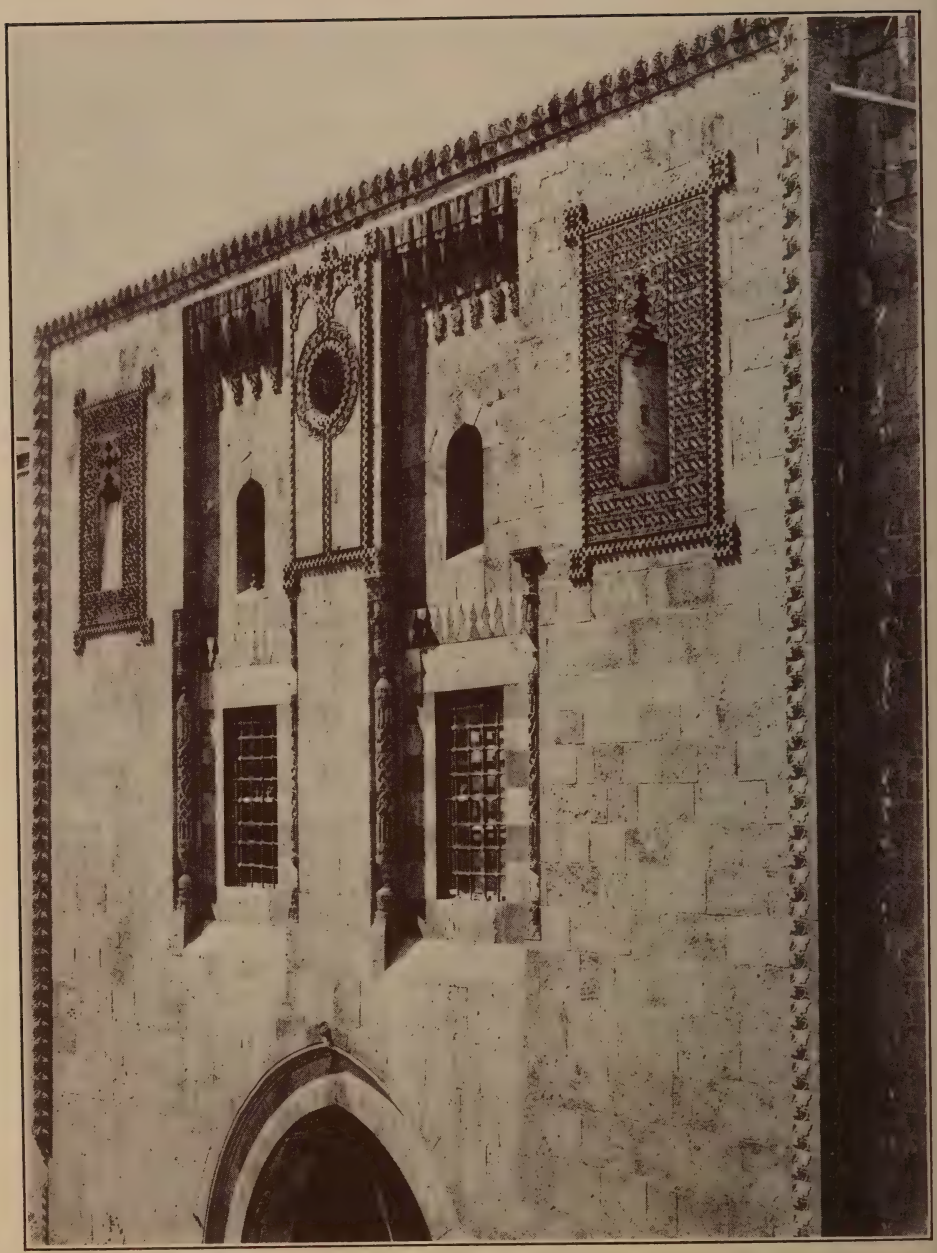
Aleppo is certainly one of the gates of the East. Its citadel, old khans, silk factories and bazaars are unrivaled. The bazaars are a dream. We have lunch in the dirtiest little restaurant in true Syrian style. Pieces of mutton, roasted on charcoal, are served from the spit directly on a piece of hot native bread. The salt is passed round in the upturned bottom of a broken jar. Sweet cakes dipped in honey are scented with rose water. All houses are built of white and black stones. The big iron gate leading to the court of the khan has a smaller inner door cut in the large panel. Is this the needle's eye which the camel cannot pass? The inner courts

A Khan in Aleppo.

with their stone pavements, fountains, and basins, external staircases, open air liwân protected by overhanging roofs must be cool and comfortable in the hottest days. A few rose bushes, almond and orange trees, lilacs, vines and palms surround the fountains. But who can tell the beauty of the divans with their wood ceilings and wainscots, painted, gold decorated with fruits, flowers, and animals. Persian pilgrims in old time, on their way to Mecca would spend a winter in Aleppo and make a living by decorating the best native houses. A mysterious light filters through the stained glass of the Arab windows. Each little piece of glass is mounted in a cone of plaster. The room opens toward the north and the blue line of the Armenian mountains. In the golden angle of a ruined room a swallow has built her nest. Is this a symbol of perennial beauty and undying art? Aleppo is famous for its pistachios. They figured on the table of Roman Emperors. They grow nowhere so well as in the red soil around the city. There is a marvellous tale of the breaking open of the pistachios in the silence of a quiet and warm August night, when the moon is full and the air is balmy.

Silk, like rugs, is woven in Aleppo on the most primitive hand-looms. Silver and gold threads are mixed by hand with the white, purple, blue, black, yellow or brown silk. The weaver is deep in a pit in front of his loom, using rough stone weights and a miserable unhewn wood outfit to create gorgeous abayehs, real garments of glory.

Colonel M., the president of the commission in charge of fixing the border, is our guide to the citadel. He is very punctual, tall, gentle, bald headed, well informed, using clear and sober words. We pass the fortified gate, the arched bridge, the chicane, the two lions' heads, one smiling, the other crying, the tomb of Elijah, the mosque of Abraham, where he milked his cow. All the fine panelling and carved wood work has been removed by indelicate hands soon after the occupation. There is a second mosque near the barracks erected by Mehemet Ali. The windmill that the provident invader built for his garrison is still standing. The sixty meters deep well, cut through the hill has a stair running round the square shaft. Loaded donkeys were used to bring water from the deep level. The old arsenal of the Turks had a wonderful stock of ammunitions including flint arrow-heads and stone bullets. It might have been preserved as a museum, but unfortunately has been plundered by antiquarians. The old castle is under repair and will shortly be turned into a museum.



Gate of a Khan in Aleppo.

It is impossible to leave the country without attempting a short visit to Karkemish on the Euphrates. The old Hittite capital is one of the best fields of excavation of the British Museum. The work has been interrupted by the war and the carved reliefs badly broken, dispersed or sold by the Turks. The steel bridge of the Bagdad line destroyed during the war has been repaired. The station of Jerablus is in the hands of the Turks. The line as intended by the German engineers ought to cut across the old ruined city. An order of the German emperor alone prevented this archaeological sacrilege. Jerablus is the modern village south of the line in the French Mandate. It has grown prosperous through the immigration of refugees. It boasts a garage with several automobiles on hire.

The track from Aleppo to Jerablus crosses a rich and well cultivated plain. The road is generally good, with an excellent new section between Bap and the old Bambix. Bombazine, a silk and cotton fabric, named after the city, made it famous in Greek and Roman times. Nowdays it is occupied by Tcherkess immigrants who built their houses with the stones of the old ruins. The walls and the sacred pond of Atargatis, the Syrian deity, are still preserved. Two seated statues without heads, many columns and capitals are scattered about.

Wheat and barley are in grass. There is a little ploughing going on. Camels, cows and sheep and all the Arabs traveling on the road, give way gracefully to the rattling, onrushing Ford. Just the time to cross two or three rivulets and we reach Jerablus. Great excitement. Our host is Hammudi the foreman who served under Mr. Leonard Wooley through all his campaigns. He lives in the court and in the lower floor of his house, the upper being occupied by the French "officier de renseignements." Our room is hung with carpets and rugs. New mattresses and glorious new coverlets, woven in with silver threads have been spread on the floor. Coffee, leben, sour milk and sweets are the first signs of welcome. But the great dish is of course the roast lamb served entire with head and legs and carefully stuffed with rice. No fork or knife but the bare hand to help yourself to the rich food. You tear a piece of the front leg or of the rear, or dig between the ribs. You grab into the inside and draw a handful of rice. You form it into a ball and push it the best you can into your mouth. Some people after awhile become quite expert at it. After a thorough washing of hands and mouth, coffee and cigarettes achieve our perfect joy. The veiled ladies and some

The Citadel, Aleppo.

Armenian refugees are living in rooms about the court. They are not allowed in the dining room, but keep peeping from every doorstep.

Is Biredjik really in the hands of the Kurds? Are bazaars and houses destroyed? Are the Turks retiring burning ammunitions? Or is this one of those wild rumors, uncontrollable bazaar gossip? After two hours' interview with the Turkish authorities at the station we are refused authorization to visit the ruins of Karkemish. The actual captain has just been discharged and the new captain has not yet arrived. The mudir keeps phoning to Biredjik but receives no answer. He will wire. But the telegram must reach the Wali at Urfa and the line has just been cut. Why insist any more? Kismet. East is East. Let us go home.

West we drive leaving Aleppo with a light luggage for two days. The Syrian peasants are ploughing the rich red soil or cleaning the young wheat from yellow mustard weeds. No trees, but many flowers, purple anemonae and small iris. The villages are all grey with red roofs. Camels in caravan and automobile trucks bring the goods of Europe, soap, sugar, manufactured articles over the classical road of Alexandretta and the high pass of Beïlan. Steam rollers repair the sunken patches.

A Roman road crosses the marshes, its stone arches still strong after centuries. The lake of Antioch is a quiet sheet of water in the distance. We pass the hills, the plants of olive trees, the high defile, the dark Mediterranean pines. The sea which we missed for months opens under our eyes, and a sweet shore line. A fresh sea breeze blows in our faces. Alexandretta spreads friendly at our feet. Hospitable little city, not unlike the Riviera, all perfumed with roses and orange blossoms, nothing but water divides you from yonder giant cities of America. Powerful oil companies have already bought and marked the land for an eventual pipe line to be connected with the oil field of Mosul. A society is forming to drain the lake of Antioch, reclaim the soil, plant cotton, and build a modern city for Armenian and Greek refuges. A new spirit of enterprise stirs the old dead bones of the land. Will Antioch, once a capital of the East, and the first Christian city, ever arise from her deep slumber? Cyclamen grows under the shade of the broken walls, and the cool recesses of the Iron gates. Black goats and shepherd boys climb the precipitous slopes. From a ruined aqueduct water is slowly dropping, a symbol of the old glory that was Greece and Rome. Meanwhile, palms, vines, aloes, ecualyptus, mulberry trees, orange, lemon trees,

bananas and roses are growing rank in the red soil of the gardens by the river. The summits of Lebanon are snow white and cut a marvellous line against the blue sky. The air is fragrant with perfumes. A procession of Syrian peasants and three donkeys is led by a boy blowing the double flute to charm the long winding way. Is Pan himself or Puck announcing better times?

Within a week out boat greeted the shore of Greece, the temple of Poseidon, the desolated cliffs of Pireus and looming in the distance, the beautiful lines of the Acropolis, a rest for eyes and soul. We were on our way home.

A WOODCARVING FROM EASTER ISLAND

By H. U. Hall

THE object figured here from the Museum's Easter Island collection belongs to a class of woodcarvings usually referred to in the literature of Easter Island as household gods. It includes figurines representing men and women, various animal forms, and monsters combining features of both the former categories. The Museum's collection contains several fine examples of the first; the others are rarer. In Dr. W. T. Brigham's survey of Polynesian material in British Colonial and European museums five figures of lizards or man-lizards, similar to our example, are mentioned: four in the Museum für Völkerkunde at Berlin and one in the Archæological Museum at Cambridge.[1] To these must be added one in the Museo de Etnologia y Antropologia at Santiago in Chile,[2] another which in 1904 was in the possession of Mr. J. Edge-Partington of Eltham, Kent,[3] and still another which recently formed a part of the collection of Mr. W. Knoche, in Santiago.

But little is known of the old customs of the people of Easter Island or Rapanui, or of the religious beliefs and practices with which the carvings appear to have been associated. Consideration of the native terms for the objects, as these have been reported by travellers, yields little more than the somewhat meagre amount of information as to the physical nature of the images which seemed important to those travellers' informants at the moment when the names were communicated. These names are not moi toromiro and moi kavakava. The word moi, which forms part of both expressions, has been recorded also as mohai, moai. In W. Churchill's compendium of Easter Island vocabularies[4] the meanings given for this are "idol, image, sculpture, statue." The first of these meanings is presumably a missionary inference and the word, thus without context, is in any case of too indeterminate a significance to be useful for inferences of any other kind. Any of the other meanings is quite evidently as appropriate as it is barren of further

[1] Occasional Papers of the Bernice Pauahi Bishop Museum, Honolulu, I, Part 1, pp. 19, 51.
[2] Publications of that museum, Vol. III, No. 1, p. 243.
[3] Man. 1904, No. 46.
[4] In Easter Island, Carnegie Institution, Washington, 1912.

implication. Toromiro is the native name for a small tree or large shrub, a kind of mimosa, from the wood of which the figures were made. The name is thus simply descriptive, an image of Edwardsia wood. From the connotation of the second word we do get an illustrative reference to the wanderings and the physical environment of the Easter Islanders. Miro is a tree, plant, wood. In the Paumoto Archipelago, in Mangareva, and in Tahiti, the same word denotes a tree with red wood, Thespesia populnea.[1] The reddish colour of the wood of which the images are usually made recalled to the colonists of this last outpost of the Polynesian migrations to the eastward the more abundant and tractable raw material for their handicrafts to which they had been accustomed at happier stages of their long voyagings out across the Pacific. But why, then, the qualification implied in the other component of the word? The Easter Island vocabularies do not show this component in its simple form. But we have hakatoro, to cause to stretch, to elongate.[2] In the Paumotus, fakatoro means to stretch out the hand; in Tahiti, faatoo, to extend a limb. We have thus, in the Polynesian speech of this southeastern province, the word toro in composition with various forms of a causative prefix which in Easter Island alone is recorded in several other forms, aka, haga, paka, haa, ha, and we see that toro connotes extension, length, prominence. This is confirmed by Mangarevan tore, a thing jutting out, projection, and by the same word in Tahitian meaning disposed in rays. That the same word should appear as what we should call adjective, verb, and noun is not cause for surprise in regard to a language in which parts of speech are scarcely differentiated. It is a strikimg commentary on the poverty of the environment on which the Easter Islanders had to draw for the satisfaction of the remarkable impulse to artistic creation which was in them and which, far from being stifled by the exiguity of the media, was by that encouraged to a performance unequalled in its kind between the Melanesian islands and the waste of waters east of Rapanui—a suggestive commentary also on the resilient and enduring hardihood of their spirit in these poor circumstances, that they should make the best of the poor material at their hand to the extent of calling a stunted plant of which the largest example might be some ten feet high and five inches

[1] In Easter Island, Carnegie Institution, Washington, 1912.

[2] Remarks on Phallic Stones from Rapanui, J. L. Young, Occasional Papers of the Bernice Pauahi Bishop Museum, II, Part 2, p. 31 (171).

Easter Island Woodcarving.

through the trunk,[1] by the same name toromiro, the tall tree, par excellence, which the Tahitians gave to their sacred tree, the stately Thespesia. The figurine has the characteristic bowed form which is due to the difficulty of getting a straight length from the contorted stem of the Easter Island mimosa.

Kavakava, the alternative word recorded as determining the kind of moi in question, is said to refer to a character of the finished product, while toromiro distinguishes the raw material, wood, by way of contrast to that used for the gigantic statues of volcanic stone, moi maea (mea), for which Easter Island is famous. The word is said to mean rib, and to be applied to the woodcarvings in question because in them, both human and animal, the representation of the ribs is usually a well marked feature. The identity of both parts of the reduplicated form with the word used elsewhere in Polynesia for the infusion of the roots of Piper methysticum (kava) which is a favourite narcotic drink of most Polynesians is striking. Strangely enough, the settlers of Easter Island did not bring with them this cultivated plant. The word survives among them with the meaning bitter, evidently in reference to the acrid taste of the kava root. Has it perhaps also survived to express a visual memory of the appearance of the root shredded in preparation for the drink, a memory excited by an imagined similarity of the close narrow parallel ridges by which the woodcarver represented ribs in the figurines? Or perhaps kava in the reduplication as recorded represents a misunderstood kavai.[2] The latter word signifies a beard, and a short curled tuft commonly appears on the chin of the statuettes which imitate the human form.

As to the significance and employment of these images, most of the meagre information which we have is summed up by R. Andree[3] as follows: They "were employed as small house gods. . . . These small idols served the purpose of presenting the worship of the natives to the great high god Makemake. They were kept wrapped up in bast or small bags and brought out only at the feast of the god when bananas, fish, and eggs were offered to him. . . . They were the most effectual intermediaries of the petitions of men to the divinity and had indeed also special functions unknown to us."

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[1] W. J. Thomson, Te Pito te Henua or Easter Island, Report of the National Museum, Washington, 1889.

[2] Cf. Churchill (quoting Geiseler, Die Osterinsel, Berlin, 1883), ibid.

[3] In Globus, LXXVI, pp. 389, 390.

J. L. Palmer[1] repeats the remark of the Jesuit missionary Father Eugène (1863–1865) "that although they had 'household gods' suspended to the roof of their dwellings, they did not worship them." W. J. Thomson[2] reports that they "were made to represent certain spirits and belong to a different order from the gods, though accredited with many of the same attributes." He repeats the statements gathered by Andree from Gana[3] and Geiseler that "they occupied a prominent place in every dwelling and were regarded as the medium through which communications might be made with the spirits, but were never worshipped."

We have then to reconcile the contradictory statements that they were "idols" and "gods" and yet were not worshipped. No doubt the missionary whose assertions seem to have been adopted by later visitors was unable to make his own conception of worship tally with what he may have heard or observed of ritual observances. But we know that elsewhere in Polynesia ancestors became tutelary gods, were intermediaries between men and the higher deities, and were worshipped in the sense that sacrifices and petitions were made to them.

According to Palmer, the "domestic idols" of Père Eugène included, besides human figures, "a quantity of very odd figures carved, representing lizards, sharks, fowls, nondescripts."[4] A carving of a monster, combining attributes of a human being and of a bird, is figured by R. Andree in the article to which reference has been made. This image has perhaps some relation to the bird-man who played an important part in the ritual feasts of the island, a prominent figure in the so-called hieroglyphs which were inscribed on wooden tablets and breast ornaments, and is represented in the rock carvings and in paintings on stone walls of old houses. On the other hand an image published by St. George Gray[5] appears to represent a rat simply; while another moi toromiro figured in the same volume of Man, and referred to at the beginning of this article, is described as a "human figure with the head and tail of a lizard." The example figured here differs from this in several respects. The ribs are not marked, as they are in the Edge-Partington example. The tail

[1] A Visit to Easter Island, or Rapa Nui, in 1868. Journal of the Royal Geographical Society, XL (1870), p. 174.

[2] U. S. National Museum Report, 1889, p. 470.

[3] In R. A. Philippi, La isla de Pascua, Santiago de Chile, 1873.

[4] Palmer, ibid., p. 180.

[5] Man, 1904, No. 96.

disappears between the thighs; the lower legs are not represented, but are cut off by a ridge encircling the lower portion of the image, which ends here in a rounded handle coming to a point at the extremity. The shieldlike plate which covers the hips and upper part of the thighs behind is here replaced by a curved ridge in strong relief which evidently represents the upper outline of the pelvic basin and the intention to emphasize a condition of emaciation which commonly marks the execution of these figures. The fanlike arrangement of vertical ridges in which the raised and segmented ridge representing the backbone terminates on the surface of the pelvic shield, if one may so call it, of the Edge-Partington image, is absent here, but is probably represented by the lobular lower portion of the raised but unsegmented backbone, though this terminates above the pelvic border. In the case of the rat mentioned previously the fanshaped termination of the backbone is said to be present also, but it cannot be seen in the illustration. The wings of the bird figured by Andree are brought together behind the back, and, as if tied there, expand at the tips into a similar fanlike appendage. It is perhaps, in this case, an imperfectly differentiated representation of spread tail feathers, and, possibly misunderstood, may have influenced the modelling of the backbone of the other forms of image. The arms of our figure, of the Edge-Partington example, and of the rat of St. George Gray are all disposed in a similar manner, the extremities being brought together in the attitude of a suppliant; in the last two cases the digits are marked. It seems to me to be doubtful that, in the case of the lizardlike figures at any rate, anything but an unconsciously anthropomorphized lizard is to be seen; that the aim was to produce a representation of a lizard, not of a man-lizard.

The two images figured in Man are pierced transversely through the raised backbone, so as to be suspended by strings from the necks of the participants in the festival of the high god. They seem to have been usually carried in that manner in procession. The handle of the object here, well-polished by use, indicates that it was carried in the hand. It is an unusually large example, over two feet long, and would have been awkward to carry slung about the neck.

In other parts of Polynesia, the lizard had considerable importance in magic and religion. The god Tangaroa was incarnated as a lizard. The lizard was an incarnation of the Maori god Ha. Lizards were omen givers in Samoa. They had a magical origin from the scales of the Maori ogre Kupuwai. In the South Island of New

Zealand it was believed that killing a lizard averted the evil consequences of a dream. Clearly the Easter Islanders shared the general Polynesian belief in the magical or religious importance of these reptiles. Perhaps a creature which, though so remarkably different from their familiar domestic fowls and the seabirds, yet, miraculously enough, produced eggs, the food, as we have seen, of gods, might be regarded as a peculiarly efficient mediator between gods and men, when eggs were offered to Makemake and the effigies of these and other intermediaries were brought before him. If, as seemes likely, all these images are connected with the reverence shown to ancestors everywhere in Polynesia, another Polynesian belief that lizards were the food of departed spirits in the underworld may have some significance here. At still another point the egg producing powers of the lizard may have brought him into relation with Rapanui superstitions. The first egg of a certain species of seafowl, which came to an islet near the shore for the nesting season, to be brought in by the leading swimmer of a number of competitors who represented important men among the population gave the right to his principal to be regarded as bird-man for a year. The functions of this personage are not clear; but the magical or religious importance of his office seems to be indicated by the frequency with which the representation of such a monstrous creature, otherwise merely mythical, appears among the artistic productions of Easter Island.

THE EDUCATIONAL DEPARTMENT OF THE MUSEUM—ITS FUNCTIONS

By Helen E. Fernald

ART education in the schools was the field toward which most teachers and leaders were looking hopefully about ten years ago. New ideals and new methods were taking the place of the old ones and had already awakened much interest and secured most encouraging results, but the school seemed powerless to combat opposing outside tendencies. How should the general public be reached, how interested, how trained? It was then that the museums came to the unexpected aid of the art educators and the schools, not only with the offer of the use of their works of art as illustrative material for the classes, but also with the decision to take advantage of their opportunities for reaching the masses of the people in a way that no other institutions could. The year 1915 is a landmark in the history of museum educational work in this country. The leading museums both here and abroad had had for some years guide lecturers whose duty it was to conduct visitors through the galleries and explain the collections to them. Soon the school teachers realized that such guidance for their classes would be of inestimable value and began to bring the children in ever increasing numbers to the museum for observation and instruction. Thus grew up the necessity of Docent Service, and in 1915 such service was first organized.

What is docent work? What do you do? These are questions so frequently asked that I am going to assume that the reader also would like an answer. To say that we are museum instructors, teachers, really explains little. "Whom do you teach? What? And how?" It is necessary to remind the reader to begin with that the field of labor is almost limitless, in theory at least. Dr. Herbert Bolton, Director of the Bristol Museum and Art Gallery, speaking at the Wembley Conference last year thus defines the field within which Museum educational work should function. "Education", he says, "whether by museums or any other agency, must be adapted to the needs of the recipients; and as the visiting public includes all classes, museum educational work can cover a wide field. . . .

When we take stock of the range of museum work we find it . . . embracing all that is known of all arts, sciences, aesthetics, music, literature . . . an ever increasing insistence is being made that museums must be educational and also minister to the multitudinous needs of the adult community. This insistence will increase and museums must become institutions for public education, and must, unlike any other institution, attempt to teach every age and stage of human life, from the cradle to the grave."[1]

In practice it is seldom that the field is as broad as this for it is limited in each museum by the nature of its collections and the particular needs of the community it serves. However, it grows in answer to demand and the aim of the work is of the highest order. The educational department of the museum has been founded to be at the service of the public. Its business is to show the public how much and in how many different ways the museum may be of use in daily life, how its collections illustrate and enliven the subjects of which we read and think, and how the influence of its art may raise the standards of beauty throughout the community. The public is interested, there is no doubt of that, and if the American people are not intelligent in art matters, if they are not what is called artistic, it is due to the fact that they have had until recently no chance to see great art of the past and no opportunity to develop taste.

So far as the University Museum is concerned, our educational work might be said to fall naturally into three divisions: academic, including the school lectures and class teaching; social, under which would come attention to visitors; and artistic, being the aid we give to art classes and schools and to individual artists and designers.

The greatest number of children are reached through the grammar school lectures. Every week for six months during the school term the Museum offers talks which are related on the one hand to the collections in the Museum and on the other to what the children are studying in school. Teachers make reservations in advance for seats. There are talks for the youngest children on the Indians and Eskimo, for history classes on Life of the Romans, the Greeks as Builders and Artists, and the Crusades. Geography classes may come to hear about the peoples of the Philippines, South America, Africa, or China and Japan. Usually the classes are brought half an hour early and are conducted through the Museum before the

[1] *The Museum Journal*, August, September and October, 1924.

lecture begins. Visitors are often surprised to see on certain afternoons each week the hundreds of children filing through the galleries while the docents explain some of the outstanding objects to them. For many of the children this is their first visit to a museum and they look forward to it as a great treat. The hour of informal lecture in the auditorium is in the nature of a history or a travel talk according to what the youngsters are studying just then in school and it is illustrated with lantern slides and with objects in the collections. The lecture ends, usually, with a reel of moving pictures on the country which has been the subject of the talk, and the children always look forward to this with much anticipation. That the pupils enjoy these visits to the Museum is quite evident from their expression, their eager curiosity, their exclamations of appreciation, and their rapid fire of questions. They conceive a friendly attitude toward the Museum and staff as being there especially to interest them and answer their questions.

Results? We can only go on faith in the power of beauty and learning to make themselves felt. It is doubtless true that some of the children get nothing from the visit except the idea that a museum is a place where are kept beautiful things made long ago and people to tell you about them. Even that is something. But when we remember our own childhood and the deep impression made upon us by certain trips to museums where we saw REAL THINGS we know that the work does have results. Such influence cannot always be measured, it is woven into the fabric of our lives in such a way that it has seemed part of our growth. The teachers certainly feel that the Museum does much to stimulate the interest and broaden the experience of their pupils, for their appreciation has been keen and their request for reservations for the lectures has often made it necessary to repeat them on Thursdays and even Fridays in order to accommodate the numbers. In the last three years over eighty three thousands of children of grammar school age have come to the Museum with their teachers for these talks.

Another course of lectures has been offered each year for High School pupils; six or eight talks each fall and spring. The aim of these lectures has been to supplement the studies in Ancient History, Latin, Greek and Art. Pupils are not usually brought by their teachers to these but come of their own accord after school is over and the teacher gives them some credit for attendance. We have found in these lectures that laying stress upon the excavations

carried on by the Museum in the field captures the interest of the pupil and makes history appear in a new light to him. Certainly the element of adventure and the problems of method involved in scientific excavation appeal to him and make the subject of history and ancient languages far more fascinating to the average boy and girl. Prehistoric man, Crete, Greece and Egypt are all subjects using as illustrations archaeological material that the Museum has obtained through its expeditions. The attendance varies between three and four thousand boys and girls each year.

Besides the lectures given by the docents at stated times in the auditorium there are the Gallery Talks. These are arranged by appointment. We believe that this work is almost the most important of all. Every one knows the great teaching value of original objects and teachers of many different subjects and from cities and towns a long distance away as well as those in and near the City bring their classes to the Museum to be shown the collections and have them explained in connection with the subject the pupils are studying. Here the groups are small, docents come into personal contact with pupils and teachers, learn what their problems are and just what point the teacher desires to have emphasized. The variety of interests and ages and background constitutes the problem for the docent, for she must be ready to adapt herself as well as her methods of presentation to any group at a moment's notice.

If the class is one of small children the chances are that they will want to see the things made by some primitive people. The American Indian collections are strongest in their appeal to the little ones. They run from painted buffalo robe to beaded papoose cradle, are enticed by the drums and fascinated by the medicine men's masks. "What is that made of?" they ask. "What is that for?" Some schools try interesting experiments which should have far reaching educational value. For instance, every year the Moorestown Friends' School at Moorestown, N. J., brings its third grade children to the Museum to study the Indian collections. The children are told about the objects, make sketches of them, take notes, and return to school full of ideas for what is known as INDIAN DAY. Through the rest of the year they are working toward this Day. Each child makes his or her own Indian costume according to the designs they secured when at the Museum. The boys earn the feathers for their headdresses, the girls must win the beads for their headbands. A tipi is built in a woods near the school. When INDIAN DAY arrives

in the spring the whole school betakes itself to this forest where parents and friends watch most realistic scenes of Indian life acted out by the children among the things they have made. The squaws cook the food and take care of the tipi, tend the dolly papoose and hoe the corn, while the hunters take their bows and arrows and go in search of game. And somewhere in the forest is hidden a deer with all the steak for dinner tied up inside its skin! They also make Indian pottery decorated in the Indian designs. All this is a study by which the children learn to know Indian life so that they will never forget it; incidentally they are learning how to use a museum as a source of information. A number of other schools do something of this sort though perhaps to a lesser extent. One school studied Eskimo life in the same way except that the play was carried out with models instead of in the snow. Similarly, still another school worked out all the details for the model of a little neolithic lake dwelling.

The majority of classes, however, coming for gallery talks are from High Schools and are studying Ancient History. They can see in the Museum many of the originals of the pictures in their text books. There is the alabaster jar of King Sekhemui of Egypt upon which is an inscription which illustrates the old custom of naming a year from events that happened during it. There are the things that the Egyptians used in their daily life, mirrors, rings, necklaces, writing materials, dolls and games. The interior of the Egyptian tomb, a mastaba of the Fifth Dynasty, is very impressive and teaches burial customs in Egypt as no description alone ever could. History classes are usually conducted from one object to another according to a chronological order so that the sequence may coincide with the periods as the pupils have been studying them. Classes reading Homer or Virgil are of course much interested in the copies of the famous Mycenaean gold cups and bronze daggers and in the reproductions of frescoes from Mycenaean palaces as well as the copies of bronze utensils, furniture, and other articles from Pompeii.

Not only do classes from the city high schools come to the Museum for gallery talks, some regularly several times a year, but private schools and colleges from all over the eastern part of the state, and from New Jersey, Delaware and Maryland as well. Many of them are interested in other subjects besides Ancient History. Some are studying primitive peoples and want talks on the Indians of the Amazon or the African Negro, or on the Maoris. Some are

taking up the Far East and wish the Arabic and Chinese collections explained from the point of view of history, or art, or religion, or customs. There are classes in special subjects also. A group from Temple University comes each year to see the material illustrative of the evolution of writing, of which the Museum possesses examples from many parts of the world and many periods. Some are very famous examples; for instance, the ebony tablet of Mena with the oldest continuous line of Egyptian hieroglyphics known, and a black diorite tablet from Mesopotamia on which is an inscription possibly the oldest so far found anywhere in the world. Here the development of cuneiform and of Egyptian hieroglyphics may be traced, classes are interested in the story of their decipherment, and the copy of the Rosetta stone may be seen also, as well as examples of Egyptian demotic, Greek, Latin, Chinese, Arabic, Sanskrit, Hebrew, Sumerian, Hittite, and other writing, even the as yet undeciphered Cretan linear and Etruscan inscriptions. The Peruvian Quipu, Indian picture writing of North America and the hieroglyphic inscriptions of the Maya in Central America represent the art of writing in this hemisphere.

There are many Bible classes, large and small. The older people are often studying history of religions, Buddhism, Hinduism, Mohammedanism, the Egyptian and Babylonian beliefs, the beliefs and superstitions of primitive peoples. A sudden and rather violent mental turnover takes place in the mind of a docent called down to meet a class that she supposes wants to see the Egyptian tomb and finds wishes to have a general comparison of all the religions of the world! Most Bible classes, however, are not quite such a strain on the resources of the docent, and are satisfied with an examination of the Babylonian tablets containing stories of the creation, flood and fall of man, the slabs from palaces of the Assyrian kings mentioned in the Bible, and the door socket from Ur upon which Abraham doubtless turned the great door of the Temple more than once. We are always proud to show our famous Greek gospel manuscript to these classes, for it is the earliest fragment known of any part of the New Testament.

Frequently schools are studying some one phase of art or industry and want the instructor to explain all the various forms as found in different ages throughout the world. A certain college class comes every year to see the pottery and we lead the students from the more primitive forms to the highest products of the pottery art. Hand

shaped wares are illustrated by the coiled pottery of the American Indians and compared with the wheelmade shapes of Greek vases. Peruvian and Maya painted decoration may be compared with Greek and both with Chinese and with Persian painted and glazed potteries and porcelains. Some classes are studying glass and glazes and the docent explains to them the Egyptian and Babylonian glazes and the Roman and Syrian glass and methods of ancient manufacture. Students of jewelry find plenty of material to study, from the seed and monkey tooth necklaces of the Amazon tribes to the gold ornaments of Peru and Colombia, and the exquisite works of the Egyptian, Babylonian, Nubian, Etruscan and Greek jewellers. Groups studying textiles must be taken to see the primitive weaves as illustrated in hammocks, nets, baby carriers from South America, grass mats from Alaska, pandanus mats from the South seas, cedar bark woven hats and blankets of wild goats' wool from the Northwest Coast, feather robes from Hawaii, all the wonderful coloured cotton garments from Sumatra, Java, Borneo and the Philippines, from the Aino of Japan and the primitive tribes of continental Asia, African palm fibre mats, and all the woven bags and quill embroidered garments of the North American Indians. There are also Oriental rugs, Persian brocades and Coptic and Peruvian tapestries. The Peruvian textiles are our joy and furnish an interesting climax to the series from the standpoint of technique.

Many colleges and private schools come wishing to have the collections explained as illustrating their studies in History of Art. This is comparatively simple, for the docent can base her talk upon an outline purely chronological and historical. Art in the light of historical events and as the expression of the character of a people is a very systematic way of approaching the subject. Yet the real fun comes in tracing art forms and influences into other countries, making comparisons, finding out what was contemporaneous, binding the ancient world into one whole rather than separating it into isolated sections. One can do this only with college classes or groups of older people who have a very wide general knowledge of ancient history to begin with.

Groups of men and women, clubs and societies of various kinds often visit the Museum and ask for an instructor. As these people do not usually consider themselves as students, the duty of the docent in such cases is to tell the story of the objects themselves and point out the importance, artistic value, or human interest of the things in

the collections without trying to correlate with any background of history, or religion, or art that the group might be studying. In other words the object in the case of clubs and societies is to entertain the visitors, to make the instruction interesting rather than complete, to answer questions, and stimulate appreciation. The teacher must be put aside and the docent become a museum hostess. Sometimes clubs and societies will ask if they may have lantern slide talks on some particular subject and this, when it can be arranged, the docent is always glad to do. Several groups in the last year or two have arranged for special talks or entertainments in the auditorium, especially Art Clubs, Women's Clubs and Y. W. C. A.'s. Mr. Whistler, a Sac and Fox Indian who has recently been appointed as part time assistant in the department, has already given some delightful Indian entertainments for the Girl Scouts and the Boy Scouts. The department has also at various times given Sunday afternoon lectures or Story Hours for the general public and often there are walking tours through the galleries on Saturdays with a docent in guidance.

The above should provide the reader with a fairly complete idea of the educational work done with schools, classes, and groups of people. During the last three years one hundred and forty two DIFFERENT school, colleges, and clubs have used the Museum for gallery talks by instructors, some of them coming many times each year.

When docent work was first established a principal duty was to conduct visitors through the Museum, to act as hostess and guide. This still remains one of the primary functions of the docent. It is a social duty yielding a great variety of interests and experiences. Any visitor to the Museum may have the services of an instructor for one hour free of charge whether he comes alone or in a group. The uncertainty of what to expect keeps our lives from becoming monotonous! The docent may go down to find a small boy clutching another child by the hand. Tony has been to the Museum before, to a school lecture, and he heard the "teacher" say she would show them other things any time they would come to see them, so he has brought Rosetta over and—this in a loud whisper—"please can we see the mummies?" So the docent lady takes them upstairs where they tip toe to the case in which repose two dark stiff figures of Egyptian gentlemen. And before they leave Tony has decided that he would like to be mummified and put in a museum with a gold mask over his face. Rosetta is not so sure. She gazes with big round velvety

eyes at Hapi-men's black hand as it lies unwrapped on his breast, and shakes her head.

But the visitor may prove to be a professor from some distant university, a Sanscrit scholar interested in the Hindu and Nepalese collections perhaps, or a specialist in Economics who wants to see the properties of the South American tribes. Or he may be a foreign diplomat studying examples of the art of his country in American museums. Travellers from all over the world, lecturers on all conceivable subjects from philosopy to embroidery, art dealers, students of history, art, ethnology, philology, literature, and the classics, even those studying business, all find in the collections something to interest them. Lawyers are delighted with the Babylonian contract tablets, law codes and cases; they find much ancient legal matter surprisingly modern and very amusing. Engineers gravitate to the ancient traps and drain pipes. Builders examine the stone and wood of which everything is made and ask where the Egyptians obtained their granite and what kind of stone the Chinese Bodhisattva is carved from, and is this chest of cedar from Lebanon, and of what did the ancient Egyptians make their pigments? The docent ought to be a chemist, geologist and botanist as well as an archaeologist. She is even expected to know a lot about bone and ivory, for dentists are always anxious to know about the primitive implements of the Eskimo made of these materials and one must know where to find examples of walrus ivory, reindeer horn and bone, caribou teeth, and human teeth. The great carved ivory tusks on the African ju-ju altar are always objects of great interest to dentists and they delight in the little fetish that has three human teeth stuck in its anatomy by way of imparting power to it. Physicians and clergmen, writers and business men, sociologists and artists, each one seeks to have the collections explained from his particular angle of interest, as in the case of a gentlemen who went unerringly to the washing materials in each collection. He turned out to be a soap manufacturer.

In the case of specialists and men and women who have travelled and seen and read much the docent acting as hostess and guide has the rare treat of a stimulating conversation and of enjoying with the visitor his enthusiasm and keen appreciation of the beautiful things in the collections. On the other hand there are sometimes visitors for whom the Museum opens up worlds hitherto unknown.

There are numbers of letters sent to us from persons seeking information. The educational department is supposed, judging from

the questions, to be able to explain the chemistry of Egyptian cosmetics, to translate private correspondence in German, to tell when the boat sails, to give advice as to the spring painting of the house, to identify insects, to judge of the age of oriental vases and translate the symbols on an ancient Chinese bracelet. One letter contained the request for a copy of Abraham's recipe for making beer! We do our best.

The remark is often made that children nowadays have advantages which even grown people did not possess a generation ago. It is said of the Story Hour, an activity of the educational department that is meeting with high favor. At present we limit the attendance to children in the families of Members of the Museum. Every Saturday morning through the winter the children are entertained with folk lore, legends and myths, little travel talks, or special programs. The object is to make them familiar with the people and customs of other lands, to teach them appreciation of beautiful things and train their powers of observation. Through lantern slides and moving pictures, but most of all from objects themselves do they learn about children of other countries and former times.

Another privilege extended at present only to Members is the course of lectures on art appreciation and history given by the head docent whenever a large enough number have signified their wish for them. Twenty three lectures have been given so far. This is also a useful work that is capable of extension according as the development of the building plans afford facilities.

One of the most important purposes of an art museum is to be a means of exerting a good influence upon creative art of today by improving public taste and by providing the artist with examples that may be a source of inspiration to him. The artist is a privileged character in the Museum and should have every facility for using the collections. If the Museum is an ultimate source of information it is also an ever growing source for design. European artists have known for a long time how to use their museums and American artists are fast finding out what may be done with museum material. The influence of the museum is to raise the standard of machine made articles inestimably by extending its influence to the design of things produced in the community so that the public may obtain the more artistic productions and obtain them at a fair price. A chair of good proportions ought not to cost any more than one of ugly proportions. As for much extolled Nature, museum study cannot supplant her

but it does show how other peoples of all times have used that vast storehouse as a mine of motives and ideas. From the art that has survived from ancient times one can learn fine spacing, rhythm of line, strength or delicacy of notan, and harmonious colour as from no other source.

When the art educators first turned to the museums for aid in their campaign against ugliness they could hardly have foreseen how fast the idea would spread. A great many institutions, industries and individuals use the University Museum as a source of design and it would be impossible to mention all of the uses which it serves every day.

That eight year old children know very well how to find and use the designs in the Museum is well demonstrated by the classes from Girard College that come every year to study in the Indian Section. After the docents have pointed out beads and blankets, called attention to shapes of pottery and explained the meaning of the designs, a signal is given and every one of the eighty small boys pulls out a little sketch book and a box of coloured crayons and falls flat on his stomach in front of the case containing the object he has chosen. Eagerly they devour the objects with calculating eyes and hold their breath while the crayons are pushed painstakingly across the paper. Every one is completely absorbed. They are absolutely lacking in selfconsciousness and they are all very much in earnest. The designs are not always copies but they even then have a decided Indian style. The sketch books are taken back to the school and from them larger working designs are made. Then pottery is modelled and decorated with the designs and raffia baskets are made, mats are woven and headdresses of feathers are fashioned according to notes made at the Museum.

The work of children somewhat older is well represented by a group of batiks made by the pupils of the Phoebe Anne Thorne School in Bryn Mawr. In the search for designs which could be adapted to batik work the girls, who are about twelve years old, were allowed to choose from any section. The Chinese and Arabic collections offered them the most inspiration and although in most cases the motives were taken over with little change, in some cases the designs are quite original and betray their origin only in style and spirit. Again these children have become familiar with the Museum and what they can get out of it. These same pupils study the Greek vase paintings to find costumes and properties for their

Greek pageant, and Art and English join forces in preparing the marionette shows which they both write and produce.

The city high schools are using the Museum more and more in their art work. Here too the docents are called upon to do a certain amount of individual tutoring. Pupils are sometimes bewildered by the amount of material presented to their gaze and cannot choose what would be suitable for their particular problem. The younger often do not understand terms and I remember one lad who asked feelingly if we could show him an example of "substitution", as he must find one to copy. "Subordination" turned out to be what he meant. The docent must know the collections so thoroughly that she can immediately suggest from the art of various countries many examples of subordination, opposition and rhythm of line and know objects that would yield designs suitable for silks, or for cotton prints, wall paper, rugs, embroideries, pottery, lace, metal work, costumes, etc. Of all the high schools, Holmes Junior High School uses the Museum most. And the Museum is being taken to the schools. Mr. Dillaway, Director of Art Education in Philadelphia, has recently selected a number of coloured plates of museum objects, sets of which are distributed in the schools for the art work. Besides classes a number of individuals from the schools come to the Museum for aid in preparing papers, or designing proper settings and costumes for plays and entertainments. One teacher came to find out what would be correct costumes and poses for an Egyptian dance that her school was going to give. The docent aids in the search for such material and learns much herself by the research. The English, History and Art departments of one High School united in giving a Chinese play last year and the young playwrights, property men and costumers, as well as the actors themselves, came in a body to the Museum to see the Chinese objects and sketch those which gave them ideas. The coromandel screen was a mine of information for them. The instructor explained the historical background and helped to select those details which were contemporaneous and historically correct.

Of all those using the Museum none find it of more value than do the art students. Every day sees them sitting in groups around objects in the galleries, copying and analyzing. For students from the Pennsylvania Schools of Industrial Art the Museum has become a veritable studio and, we are assured by one of the teachers, it has been a mine of design material for them. We

encourage the use of the collections in this fashion by these young artists and though the problems they are working upon at the moment are analysis of colour and skill in technique, the wealth of design copied by them is stored up for their future use and becomes an integral part of their art equipment. Years afterwards a printed fabric appears upon the market and is hailed with delight by artists and art lovers. Its antecedents lie back in a Persian miniature in the Museum. A lamp of fine design is quite a new thing in lighting fixtures, yet the designer has embodied in it certain secrets of line and proportion learned long ago from an ancient Etruscan bronze.

The School of Fine Arts of the University of Pennsylvania makes use of the collections for its practice work in rendering and study of form and colour. Perfectly exquisite charcoal drawings and water colour studies of the sculptures, porcelains and bronzes are made by these architectural students, who may not use the designs afterward in any practical way but are nevertheless becoming better artists through the study of the fine arts of classic times and of the Orient. The members of the Department of Fine Arts of the University use the collections in the Museum each year in the preparation of their annual pageant: information concerning costumes, manners and customs of the peoples of antiquity are furnished them by these collections.

Students going into the professional world from the art schools turn naturally to the Museum for inspiration and ideas. Craftsmen revel in the American Indian baskets, the Arabic pottery, the Persian brocades. Little cross stitch designs adapted from Chinese motives appear upon delicate linens, one can see the influence of a Chinese porcelain upon a charming table runner. A pottery manufacturer has designed certain garden jars after Cretan models. A jewelry craftswoman has made a beautiful brooch the design of which was based upon a piece of Chinese jade. There are handwoven rugs and bags with patterns from Indian bead work and Egyptian amulets in the Museum. One craft worker has recently used one of the Persian brocades as inspiration for a design for a cushion to be outlined in coloured worsteds on linen crash, a quaint sort of thing, and a leading women's magazine is shortly to publish it in colour with transfer patterns and directions for making.

The great field in which the influence of the art museum has lately been felt is that of the manufacturer. All this training of children to love beautiful things, all this study and practice of art students in the Museum, all this teaching and entertaining of the

general public is but one side of the effort to spread a taste for beautiful things.

For what the public demands the manufacturer will produce and what the manufacturer produces will in turn have an influence upon shaping the taste of the thousands of people who buy the product. It is a circle of influence which the Museum attempts to shape into a spiral, climbing constantly to higher standards of beauty. The head designer for one of Philadelphia's leading firms tells the writer that public taste has undergone surprising changes in the last ten years and that there is now a far greater demand for rugs of real artistic merit. Furniture, table silver, pottery, china, containers of various kinds, jewelry, iron wrought lamps and brackets, even cravats, are all vastly improved in design. Perhaps the greatest stride has been made in textiles. Certainly there are finer, more tasteful and artistic fabrics, printed silks, cretonnes, brocades and embroideries to be seen in shop windows and on the street than have appeared before in many a year. Travel abroad and the influence of imported stuffs have contributed much to keep art standards high and the fact that designers in Europe go to the museums for inspiration is an example now being followed by artists in this country. Designers for the leading manufacturers are coming to the University Museum more and more for material which will satisfy the new demand. Lace curtains have been manufactured by a famous lace firm of this city after a design inspired by New Zealand wood carvings in this Museum. It is a design of great beauty and originality but whose initial conception was based upon the peculiar beauty of a race and clime not our own.

The twofold object of educational work in the University Museum might be expressed briefly thus, on the one hand to train and enlarge that part of the public which is intelligent and artistically appreciative, that is to increasing public good taste, and, on the other, to make it possible, through influence on art and industry, for that public to obtain things that are more artistic and thus satisfy its demand for higher standards.

Already America has seen a change in its attitude toward art, it wants to be more artistic. And if its museums can help it to become a nation of beautiful cities, of artistic homes, of cultured people who find the beautiful things of life an expression of the inward beauty of life itself, then they will have fulfilled their purpose.

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I give and bequeath to the Trustees of the University of Pennsylvania the sum of .....dollars, in trust for the uses of the University Museum. (Here, if desired, specify in detail the purposes.)

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A Chinese Princess of the T'ang Dynasty.
Painted Pottery Figure. About 8th Century.

UNIVERSITY OF PENNSYLVANIA

THE MUSEUM JOURNAL

PUBLISHED QUARTERLY BY
THE UNIVERSITY MUSEUM

PHILADELPHIA, PA.
SEPTEMBER, 1925

Entered as second class matter July 27, 1917, at the post office
Philadelphia, Pa., under the Act of August 24, 1912

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THE
MUSEUM JOURNAL

VOL. XVI PHILADELPHIA, SEPTEMBER, 1925 No. 3

MORTUARY FIGURES OF THE T'ANG DYNASTY

BY HELEN E. FERNALD

ON May 22, 1925, there was opened to invited guests of the Museum an Exhibition of Chinese Art which included many examples of painting, sculpture, bronzes, and pottery not hitherto seen in this country. Charles Custis Harrison Hall was entirely rearranged and the new objects placed not only so that their own beauty could be fully appreciated but so that the beauty of the others was greatly enhanced. On the day following, the exhibition was opened to the public and the new accessions became a part of the permanent display of Chinese Art in Harrison Hall.

Conspicuous among the newly acquired objects that have attracted attention from the opening of this Exhibition, are the pottery mortuary figures coming from graves of the T'ang Dynasty and representing horses, camels, noblemen, officials, guardians, royal or noble ladies with attendants, dancers and musicians. The purpose of these notes and illustrations is to present to the readers of the MUSEUM JOURNAL these exceptionally fine groups of Chinese works of art in a clay medium. The Museum has for several years possessed a number of similar, though smaller, mortuary figures.

Visitors familiar with the Chinese Collections in the Museum may recall in particular among these earlier accessions a group of nine little ladies in procession, carrying musical instruments or wearing the long narrow sleeves that formed part of the dancing costume. These with other ladies very elegantly dressed and with elaborate and peculiar coiffure indicating their age or condition in life, Buddhist priests, officials, guardians, horses and camels, prepared the minds of visitors for the much larger and more striking groups that have been but recently added, and that it is the purpose of this article to illustrate and describe.

One of the most interesting of these latter groups, although the dimensions of its individual figures are dimunitive and the scale much smaller than in the groups illustrated here, has been published already in the MUSEUM JOURNAL for December, 1924, just after the arrival of the set at the Museum. In that group a royal or noble lady stands, tall and dignified, gowned in elaborate robes, and attended by two kneeling child figures. Before her bend two dancers in graceful attitude while beyond are three more little ladies playing musical instruments. The exquisite grace of the figures and the childlike naïvete of the group as a whole make a strong appeal to people of all ages. These figures have no trace of glaze; the hair, shawls and striped skirts are painted with red and black pigments. On the robes of the lady are elaborate borders painted to represent brocade, a feature appearing on four of the figures pictured in this number of the JOURNAL. The sculptor's art represented in these tomb models reaches its culminating point in the life size statue of a Lohan acquired by the Museum in 1914 and published in the MUSEUM JOURNAL for September, 1914. This statue is not a mortuary figure but is so closely related to the tomb models, both in technique and material, that it should be mentioned as showing to what grandeur this glazed pottery sculpture rose during the T'ang Dynasty. Technically and artistically it ranks as one of the greatest works of art known. While so much can hardly be said for the grave figurines, many of them are quite worthy of the great esteem in which they are held as works of art of a very high order.

Little is known of the development and history of the tomb figures. Most of the finds which at present make up the collections in various museums have little or no data to accompany them. We do not know how they were found, how arranged in the tomb, whose tomb it was, or what other objects were associated with them.

We have learned much about ancient Chinese burial customs from evidence afforded by Chinese literature and from the accounts of missionaries and travellers. Even in very early times, it was the custom to place the coffin in a sepulchral chamber, together with the things desired by the deceased for his existence in the next world, and over this burial room to heap a great mound of earth. Every year the descendants were expected to add a little more earth to the pile so that, theoretically at least, the most remote ancestor would be honored with the largest mound in the group of family graves.

A Lady in Waiting to the Princess.
Chinese Painted Pottery Figure. About 8th Century.

Some of the mounds had avenues of pillars and carved figures leading up to them; many were guarded by stone lions seated at either side near the tomb door, which was a false one of stone engraved with designs of dragons and demon kings. As for the furnishings of the tomb, there were times when the articles became very elaborate and costly, and, as exhibitions were held before the burial, families vied with each other in their efforts to make the funeral very impressive. Laws were made at various times with the hope of curbing undue extravagance but always there was enough spent to keep great numbers of potters and other artisans working on grave furnishings alone. Literature has provided us with detailed lists of the things buried with the dead. One list, written in the Later Han Dynasty, mentions many pots, hampers, and jars of food and drink, ninety pieces of pottery for the table, stoves, stools, tables, weapons, armor, carriages, garments, musical instruments, bells, and —a very interesting item—thirty six "images of men and horses."

It was the custom in very ancient times in China, upon the death of a prince or high official, to bury alive or sacrifice at the grave, those persons and animals whose spirits the departed had wished to have accompany him into the next world. Thus, not only horses and camels, oxen, swine and birds were buried in the tombs, but even some of the ladies of the household, male retainers, actors, musicians and dancers. Confucius made a protest against this cruel custom and gradually it was abandoned in favour of clay images as substitutes. Small clay figures are found in graves dating from about 200 B. C. and from that time on until the end of the T'ang Dynasty such figures were used. After that wood became the fashionable material. Some of the most delightful of the clay figures are said to date from Han times but the art of the grave potter reached its height during the T'ang Dynasty.

Reliable scientific evidence for the dating of the clay figures is, as has been implied, lacking, yet there can be no reasonable doubt that most of them are of T'ang. After T'ang, such figures were made of wood. Some of the tomb groups that have made their way to Europe, a very few it is true, are accompanied by the stone inscribed tablets said to have been found with them and giving the name, history and dates of the deceased. Unfortunately, the connection of these tablets with a particular group of figures rests upon no sure foundation of knowledge, although the available information may, in some cases, be correct enough. We cannot

always be certain from what provinces in China these groups are derived and indeed almost all that information is lacking, which is a matter of record where excavation is conducted under proper scientific auspices. This is a condition that may be corrected in the future. In the meantime, the best evidence we have for the dating of these tomb figures is their similarity in every way to articles kept in the Japanese Treasury called Shosoin, at Nara. The Emperor Shomu left by will all the contents of his palace as a gift to Buddha, to be housed in a special building in the monastery grounds. This unique museum was erected in 749 A. D., the year after Shomu's death, and all the articles from his household placed therein and carefully inventoried. There today we can still see them and compare them with the original catalogue. A great many of the articles were imported from China and there are objects identical with ones taken from Chinese graves, the same in clay, in glaze, in design, in technique. They cannot be later than 749 A. D., when they were put into the Shosoin, and the probabilities are that they are not much earlier, as they were the latest and finest things imported from China for the Emperor's personal use. Again, Buddhism did not become popular in China before the fifth and sixth centuries and this fact alone would place those finds which show Buddhistic influence in a period following.

The new groups in the Museum are of the recognized T'ang types and therefore belong to the period between 618 and 906 A. D. They are the substitutes for the persons and animals which, under the more ancient customs, might have been sacrificed.

The quaint charm of these figures lies partly in the simplicity of art structure and partly in the directness and unconscious humour of the character portrayal. Nearly every figure is constructed upon a few rhythmical lines and modelled with the greatest simplicity of plane. The character is caught with a few strokes, as painters say. The fire and spirit of the horses, the mournful languor of the camels, the dignified selfcomplacency of the high officials, the haughty elegance or coquettish grace of the little ladies, all serve to delight and fascinate us. Although fashioned in moulds, with details added later, many of these figures have an individuality that is striking. Some of the smaller ones have been compared to Tanagra figurines, but even here we find many that are persons, not types. Among the larger T'ang figures the art certainly reaches occasionally the heights of portrait sculpture.

A Lady in Waiting to the Princess.
Chinese Painted Pottery Figure. About 8th Century.

History plays a strange and ironic trick on us when it compels us to seek in the abodes of the dead knowledge concerning the life of a people. But so it has been all over the world, in Crete, in Greece, in Babylonia, and especially in Egypt. It is the same in China. The contents of tombs are the evidence from which we learn of the everyday life of long ago, the dress, the cooking, the music, the dancing. Ceremonies are depicted here, the relationships in great households, preparations for travel or the hunt, pets and beasts of burden, even the dwellings. In this connection attention may be called to the earliest piece of pottery in the MUSEUM'S collection, the model of a Han house with tiled roof, balconies, and figures standing at the windows.

It is from grave finds such as these in this MUSEUM and other well known collections, from objects yet to be excavated, from the thousands of still untouched tombs in China, and from Chinese literature and records of those times that we shall eventually be able to picture clearly the daily life and customs of the people in the eras of Han and of T'ang.

PAINTED POTTERY GROUP REPRESENTING A PRINCESS AND TWO LADIES IN WAITING

This is a most unusual tomb group and one which delights us with its naïve expression of conscious dignity. The mistress, a large woman of rather dominating personality, is seated upon a stool of peculiar hourglass shape, while her attendants stand proudly on either hand. The figures are of soft white clay covered with bright unfired pigments, worn and flaked by time. The royal lady wears a skirt of emerald green, the thick folds of which stick up above the high belt. Her kimona shaped blouse with its wide sleeves is vermilion and is trimmed with elaborate borders representing brocade in green and black floral forms on a cobalt background. The bright red of the jewel in the front of the headdress and the vermilion painted lips are in striking contrast to the pale creamy flesh tones and the weathered black of the hair. The face is soft and round, with the finely shaped forehead and delicately moulded features of a lady of high birth and station.

The attendants, on the other hand, are not high bred ladies, nevertheless they have the poise that proximity to nobility engenders. Their skirts are vermilion, over full frilled petticoats of striped green and red, and their blouses are emerald green. Their funny little faces are painted a pasty pink quite different from the creamy whiteness of their mistress's complexion. Both maids have their hands clasped under bright colored napkins (it was a sign of respect to keep the hands covered in the presence of a superior). They were evidently originally supporting some objects which have since disappeared leaving only the slot like holes in the tops of their clasped hands. Perhaps they held the poles of a canopy, or banners, perhaps large flowers, or some emblems of rank. Their robes also show wide painted brocade borders in green, red, blue and black. Each of the three figures has a narrow border of plain gold around the neck of her robe.

The pattern of the brocade borders shows close affinity to the decoration on some of the T'ang jars and bowls which are well known. The long skirt with high waist line and flounced bottom, the peculiar headdress, and the shoes with turned up toes and rosettes are all typical of the T'ang period. It will be noted that the feet are normal in size for these figures belong to a date before the custom of foot binding had become prevalent, if it was practiced at all.

Group Representing a Princess with Two Attendants.
Pottery Grave Figures, T'ang Dynasty.
Height: 39½ inches, 38½ inches, 39 inches.

A PAINTED POTTERY HORSE RICHLY CAPARISONED

Of all the figures made for the graves of notables during the T'ang period none can surpass the models of horses of which a number have come to light in the last few years. Some are represented in spirited action, pawing the ground or with neck arched as if pulling at a halter. Others, as in this case, are represented standing quietly, but even then there is a suggestion of movement, conveyed perhaps by the directness and simplicity with which the ancient potter recorded his impression.

This horse is of the fine white clay, like pipe clay, so commonly used for these figures. There is no glaze, but the figure is painted with rich unfired pigments, the body a dull brown red, almost magenta, and details of the trappings picked out in emerald green, black, vermilion, and dark red. Mane and tail were left in the biscuit.

It is the saddle cloth that is most striking. Thrown over the saddle and completely covering it is represented, in painted clay, a piece of bright vermilion cloth with gorgeous brocade borders, a wide central stripe crossing the middle of the saddle. Again, as on the garments of the royal lady and attendants, we see floral forms related to the designs on T'ang food bowls, again the colors are emerald green and vermilion, and the outlining in black. Here, however, the background of the brocade borders is gilded, giving a very rich effect. The large round red pompon on the rump, the gay gilded one striped with dark red at the throat, and the ends of the gold bit showing at the corners of the pink mouth complete the picture of a nobleman's mount of the days of T'ang.

Painted Pottery Horse.
From a Tomb of the T'ang Dynasty.
Height, 29½ inches.

GLAZED POTTERY HORSE

This statuette is covered with glazes of the well known T'ang type. The body is a warm amber varied by streaks of the leaf green which has run down from details of trappings and tassels. Mane, tail, and hoofs are a warm cream glaze. The under saddle cloth is quite long and is of mottled green and cream, while the top saddle cloth shows mottled amber, green and cream. A plain green cloth is drawn over the saddle and knotted at each side. It is to be noticed that on none of these figures of horses are the stirrups depicted.

The breed of horses represented by all these tomb models is the Bactrian, a massive type with slender legs which was first imported into China in the second century B. C. Its superiority over the small stocky Mongolian pony was readily seen and by the T'ang era the Bactrian horse was to be found in the stables of all the nobles and well to do throughout the empire. It never entirely supplanted the Mongolian breed, however, and the latter is still common in China.

Glazed Pottery Horse.
From a Tomb of the T'ang Dynasty.
Height, 26 inches.

GLAZED POTTERY HORSE

This is a delightfully lifelike figure of a Bactrian horse from the tomb of an important personage. The clay is white, rather coarse and hard, and is covered with a warm cream glaze. Trappings have been picked out in leaf green glaze and tassels are amber, as is the mane also. The amber has run down in streaks here and there from the tassels. Saddle cloths, upper and under, are mottled in green, amber, and cream glazes while the cloth tied over the saddle and fastened by a long band at the side is of plain amber glaze. It is a particularly lovely piece in color and the faint crazing, or minute crackle, of the glaze, the slight iridescence noticeable on the flanks, and the flakes of buff clay still clinging to the legs lend a mellowness that is very pleasing.

Glazed Pottery Horse.
From a Tomb of the T'ang Dynasty.
Height, 27½ inches.

UNGLAZED POTTERY HORSE

The horse represented in this model is moulded of the very pale pinkish buff clay often used for these figures. This model was originally painted, but the unfired pigments have worn off, leaving only traces of a blue gray on the body (most noticeable on head and neck), a pink lavender on the chest, and the familiar vermilion on saddle and base. There are no trappings other than the saddle and saddle cloth. Even the mane and tail are missing, a groove along the neck and a hole for the tail showing, however, that these details were probably to have been added later—perhaps real ones, of genuine horse hair. Blotches of a sticky yellow clay from the burial may be seen clinging here and there to parts of the model.

Most of these mortuary figures were made in moulds and sometimes the seams are visible. The legs of the animals, for instance, were always made separately and then carefully fitted on to the body. The joining can be made out more distinctly in the case of these unglazed models than in those covered with glaze. The bodies of all the figures were made hollow and the animals have large holes under the belly, a device for greater safety in the firing.

Unglazed Pottery Horse with Traces of Paint.
From a Tomb of the T'ang Dynasty.
Height, 30 inches.

UNGLAZED POTTERY HORSE

This horse is of the same type as the preceding one and also is unglazed, the natural buff of the clay being quite in evidence. Originally in this case, also, pigment was used freely but as it was not fired this paint has worn or flaked off leaving only traces. Sticky yellow clay from burial is still clinging in grooves or on protected parts of the horse.

The body must have been a rich brownish red and traces of dark gray on face and nostrils seem to indicate that the head was painted a darker colour. Hoofs were black—or indigo—while the flat rectangular base was a bright vermilion. The figure was a very gay one when it was new. This horse has no mane or tail but, as was true with its companion, the groove and hole for their attachment are plainly to be seen. Here there is a small hole in the rump just where a pompon would be placed on the crupper, a detail that leads us to suspect that the figure was intended to bear trappings of some perishable material, long since disappeared, if they ever were present at all.

Mr. Laufer has called attention to the fact that the horses found in graves in Shen-si province are usually of this bare type without other trappings than a mere saddle, while horses from Honan province are usually represented fully equipped, except for stirrups.

Unglazed Pottery Horse with Traces of Paint.
From a Tomb of the T'ang Dynasty.
Height, 28½ inches.

A GLAZED POTTERY CAMEL

The Bactrian, or two humped camel, was introduced into China about the same time as the Bactrian horse. Small models from tombs of the T'ang period have been familiar to us for some time, but such large and fine figures as the two now acquired for the University Museum have until recently been quite rare.

This model is covered with cream and amber glazes. The ruffle of the saddle cloth is leaf green and the pack covering is in the shape of a monstrous animal head glazed in amber, cream, and green, the glaze from which has run down in streaks around the camel's body. The pack saddle is of the same type as appears on a camel in the Eumorfopoulos collection and on a somewhat smaller camel in the University Museum.

The glaze is minutely crazed and shows iridescence from burial. There are remains of an incrustation of pinkish clay on several parts of the body.

Glazed Pottery Camel.
From a Tomb of the T'ang Dynasty.
Height, 36 inches.

A GLAZED POTTERY CAMEL WITHOUT A PACK

The second of the two large models of Bactrian camels is almost exactly like the other but without a pack. There is only the large oval shaped saddle or pack blanket with its two holes for the humps.

The body of the camel is a warm cream color with the glaze minutely crazed. Hair, humps, and tail are of a deep red amber glaze and there are streaks and splotches of it on the cream body. The saddle cloth is ornamented with a mottled decoration of amber, green, and cream most typical of food bowls and jars found in T'ang graves. There is much iridescence. These figures are exquisitely modelled and the outstanding features of the animal caught with true simplicity.

Glazed Pottery Camel.
From a Tomb of the T'ang Dynasty.
Height, 36 inches.

GROUP OF FOUR MORTUARY POTTERY FIGURES

As usual, the provenance of this fine group of figures is unknown, the only data available merely showing that all four come from the same grave. Here, as in the models of horses and camels, we reach the heights of the T'ang potter's art. Again we have the most striking character portrayal, for no one could doubt that the two central figures represent individuals of decided personality, probably men of importance whose spirits the master of the grave thought quite indispensable to him in the next world. The outer figures are, of course, of Lokapalas or Buddhist Guardians, whose business it was to frighten all evil spirits away from the tomb. The base of each figure is made to represent rocks.

The guardians or Lokapalas were, naturally, mythical creatures and therefore depicted according to a set type of attitude, expression and costume. Not so the two central figures. Here the potter is seen as a sculptor of real genius who is able to express by the simplest modelling and most direct manner the characteristic qualities of the individual he is portraying.

It is interesting to compare this group with the one acquired in 1924 and published in the MUSEUM JOURNAL for December, 1924, a group consisting of one Lokapala, two officials, one horse and one camel.

The three illustrations following will show these figures in greater detail.

A Group of Pottery Figures Representing Two Officials and Two Lokapalas.
From a Grave of the T'ang Dynasty.
Officials: Height, 54 inches. Lokapalas: Height, 50 inches.

POTTERY FIGURES OF TWO OFFICIALS IN LONG GOWNS AND HIGH HEADDRESSES

That the four figures which compose this group came from the grave of some princely personage seems evident when we consider the two statuettes of officials here presented. They appear to represent men of rank and position, perhaps advisers, ministers of state, or priests connected with some form of worship. At present this type goes by the name of "official" or "minister." Doubtless the details of dress, especially the forms of the high hats, would tell us directly of the identity of these gentlemen if we knew more about T'ang costume.

Both figures would seem to be portraits and each has a feature which strengthens us in this opinion. The figure on the left portrays a man whose left hand has been cut off, and the stump is concealed by the sleeve. The official on the right has decided peculiarities about the eyes and has a strange hump on the back of his neck besides. Perhaps they were court characters of their time. Certainly we can imagine the first as a fat, stupid, lazy man, sensual and cruel, the other the court wit, quick of temper, and with a keen sense of humour, a satirist surely.

The figures are glazed except for the heads and headdresses, which were originally touched up with unfired pigments. The one handed man wears an upper garment of plain yellow amber running to dark brown on his right side. The borders are of dull mottled leaf green glaze. There is a slot like hole in the hand at the belt showing that the figure originally held something—a staff with an emblem of rank perhaps. The long skirt is cream colored, into which run streaks of amber and green from the colored glazes above. The shoes with their turned up toes are green.

The Jester is the more energetic and graceful man of the two and the coloring of his robes is more beautiful. Here a rich cucumber green predominates, covering the upper garment entirely and running down onto the cream skirt in streaks. Only the borders at neck and sleeves are of amber mottled with cream. The shoes are of the cucumber green. The folded and covered hands have the same kind of socket above as is seen in the right hand of his companion.

Food bowls of the T'ang period, some of which may be seen in the Museum collection, show these same glazes, mottled in the same way.

The glaze on both figures is very minutely crackled. A faint iridescence on the lower parts of the figures reminds one of the long burial in the mounds from which they have so recently been released.

Pottery Figures of Two Officials.
From a Tomb of the T'ang Dynasty.
Height, 54 inches.

GLAZED POTTERY FIGURE OF A LOKAPALA OR BUDDHIST GUARDIAN

Figures like this were supposed to protect the graves from attacks of demons such as the one here being trampled under foot. Buddhists believed that there were four such demon kings, one to guard each quarter of the Universe. From early T'ang times it became the custom to put models of at least one or two of these Lokapalas in the grave with the other figures. Dressed in armor over flowing robes, standing in attitudes of fierce menace, and with glaring expression, they were well calculated to strike terror to the heart of any grave intruder.

This Guardian wears a helmet made to represent a phoenix bird whose head, wings and tail rise in a high crest. The armor is of the sheet variety, a type which, as Dr. Laufer points out, was probably never used in China but remained merely an artistic motive introduced from the west along with the Buddhist figures themselves. It is elaborate armor consisting of large breastplates and dossière connected by leather straps over the shoulders, the two breastplates joined in front under a leather strap which is buckled to a wide leather girdle. Over a short full skirt of cloth, glazed in amber, is a shorter divided skirt which probably represents plate mail, for along the lower edge may be seen what resemble a row of laminæ. Plate armor was the type worn in China from early T'ang to Manchu times. Leather or padded cloth was literally lined with hundreds of small iron or steel plates.

The upper sleeves are fashioned like great dragon heads out of whose mouths emerge the arms clothed in double sleeves. Legs are encased in greaves and the shoes are large and pointed. The demon upon which the Guardian tramples throws up one arm with its ugly three clawed paw and bites savagely but to no avail at the heel of his conqueror.

Head, headdress, and hands are in the biscuit, that is, the unglazed pottery; the rest of the figure is covered with the characteristic amber, straw yellow, leaf green, and cream glazes with the usual mottled effect. There are traces of pigment on the face and helmet, the lines of black representing beard and mustache being most clear. The upraised hand is pierced, probably for a lance or spear of wood or some such material which has long since perished.

Glazed Pottery Figure of a Lokapala.
From a Tomb of the T'ang Dynasty.
Height, 50 inches.

GLAZED POTTERY FIGURE OF A LOKAPALA COMPANION TO THE OTHER

The second of the two Guardians is, if possible, more fierce in aspect than the first. It is similarly treated, the glazes covering the whole figure with the exception of head, headdress, and hands. The hair shows in this one, under the phoenix bird helmet, and a small goatee appears upon the chin. Again the upraised hand is pierced to hold a lance made of some material other than clay.

Probably most famous of all Guardian figures known is the clay Mace Thrower in the Sangetsudo at Todaiji, Japan. It is a solitary figure, without a companion. In the same temple are four very fine life size clay figures of the Shi Ten O (the Japanese term for the Four Guardians) and these guard the altar in the Kaidanin. These five Japanese statues are contemporary with the tomb figures we are presenting and we can see that Professor Fenollosa struck very near the truth when he wrote, in 1913 before much was known of Chinese T'ang sculpture, "It is probable that in these fine statues we have very close approximation to Chinese originals; and we can therefore feel that we are in them virtually studying the art of early T'ang."

It is to be remembered that all figures of Guardians do not necessarily belong to the group of the Four Lokapalas. There were, earlier still in Buddhist iconography, two Dvârapâlas, guardians who held thunderbolts and acted as door keepers. Some say their origin can be found in figures of Indra and Brahma who were adopted by the early Buddhists of India from the Hindu pantheon. In Japan these two guardians are called Ni Ten O. They stand on either side of the gates of Japanese Temples. In T'ang times the Dvârapâlas became confused with two of the Guardians of the Four Quarters of the Universe and where attributes are lacking it is impossible to tell whether the figures are Dvârapâlas or two of the Lokapalas. The fact that the Lokapalas were kings over various classes of demons would lead one to consider our two grave figures as belonging to that group since they are shown tramping demons under foot. These can be compared with two stone statuettes of guardians in the Museum collection in which case the bases represent rocks only.

Glazed Pottery Figure of a Lokapala.
From a Tomb of the T'ang Dynasty.
Height, 50 inches.

A SOUVENIR OF THE GREAT EXPLORERS

By H. U. Hall

THE UNIVERSITY MUSEUM has recently received from Alaska an object of quite extraordinary interest, found in an Indian village on Admiralty Island by Mr. Louis Shotridge, of the American Section of the Museum.

The circumstances of the finding of this object are as follows. Mr. Shotridge, himself a full blood Alaskan Indian and a chief of the Chilkat tribe, who has been for many years an assistant in the Museum, was sent two years ago to Alaska to visit certain remote and little known native villages on the southeastern coast, to obtain information about their customs and to collect specimens of their handiwork for the Museum. Recently he visited Admiralty Island and obtained from its inhabitants a collection of ceremonial objects of great interest. These have lately been placed on exhibition in the Museum. Among the objects in this collection is an ornamental breastplate from Angoon of which Mr. Shotridge wrote: "This breastplate is very rare and expensive. The greatest care should be taken of it." No other information was forthcoming at the time except the native name of the object which Mr. Shotridge translated as "Raven Cape." The interesting thing about this object is that it is a product of the island of Tahiti and is not Alaskan in its origin. Moreover, it is an object of a class that has not been seen in the island of Tahiti for many years. Though showing evidences of age, the breastplate is in excellent condition and shows the care with which it had been cherished and preserved.

The interesting questions arise when and how did this object find its way from Tahiti to the Alaskan coast and why was it cherished by a native tribe and used in their ceremonial exercises and dances? Mr. Shotridge at first evidently supposed it to be a native product of Alaska. The fact that it had a name, Raven Cape, shows that it was naturalized among the people to whom it had come as a stranger. Also it is clear that it was no recent acquisition of these people; and the collector has, as we shall see, lately gathered certain information in the form of a tradition which appears to connect Raven Cape with Captain Cook himself.

The first direct communication between Tahiti and the Alaskan Coast of which we have any knowledge, was made by Captain James

Cook in 1778–1779 and the second by his sometime lieutenant, Captain George Vancouver in 1792. Of these two voyages we have detailed records.

Tahiti was discovered by Captain Wallis in June, 1767, when he showed to the natives the first goats they ever saw. Their introduction to the animal is thus described in Captain Wallis's narrative.

> As one of these Indians was standing near the gang-way, on the larboard side of the quarterdeck, one of our goats butted him upon the haunches; being surprised at the blow, he turned hastily about, and saw the goat raised upon his hind-legs, ready to repeat the blow. The appearance of this animal, so different from any he had ever seen, struck him with such terror, that he instantly leaped over board; and all the rest, upon seeing what had happened, followed his example with the utmost precipitation.—*An Account of a Voyage Round the World. By Samuel Wallis, Esq., Commander of His Majesty's Ship the Dolphin.*

When Captain Cook landed on Tahiti six years later, the natives were more familiar with goats, through the increase of stock that had been left with them by Spaniards and Frenchmen in the meantime. Cook himself left some goats when he paid this second visit to Tahiti. The Tahitians might by that time have been using goat's hair for making such decorations as the fringe which surrounds our breastplate.

In 1777–1779, Captain Cook on his third voyage of discovery sailed from Tahiti to the American coast, which he reached at a point on Nootka Sound, stopping only at Christmas Island and the Sandwich Islands, both of which he discovered on the way. From Nootka Sound, Cook sailed northward along the coast until he found the coastline running westward. He then followed it until he found the entrance to Bering Sea and pursued his voyage northward into the Arctic Ocean. After leaving Nootka Sound, Captain Cook was prevented by heavy weather from keeping in close touch with the land, but on May 2, 1778, he was near Cape Edgecombe, which he named. This is close to Sitka and opposite Admiralty Island, which lies nearer the mainland. It would appear that Cook had no communication with the natives either there or at any point between Nootka Sound and Cook's Inlet, though parties from these regions may have visited him while he remained at Nootka Sound. We

Tahitian featherwork breast ornament found in Alaska.

have no evidence that he actually touched at that part of the coast where Admiralty Island lies. From the narrative of his voyage, it would appear that his passage along the coast from Nootka Sound to Prince William Sound was made continuously without interruption. There still remains, however, a possibility that our breastplate may indeed, as the native tradition indicates, have been carried by Captain Cook during his third voyage from Tahiti to Alaska.

Next we have George Vancouver's voyage on the Discovery in 1792. Vancouver, who had been with Cook on his third voyage, left England in 1791 on an expedition of his own with a commission from the Government to explore that part of the American coast sighted by Captain Cook and to look for a Northeast Passage. The expedition first proceeded to Australia and New Zealand where it had some work to do and then sailed for Tahiti. On board the Discovery was a surgeon's mate named George Goodman Hewett who had an interest in natural history and in ethnology and who collected specimens of native handiwork. That he brought a number of such objects on board the Discovery before she left Tahiti is a known fact. It is also known that he made collections on the Alaskan coast and traded with the natives there. From Tahiti, the ship sailed to the Sandwich Islands; thence, direct to the American coast and made her first landing on the northern part of the Californian shore. That was in April, 1792. From then until the autumn of 1794, Vancouver explored the entire coast northward to Cook's Inlet, only returning twice to the Sandwich Islands to winter. In 1793 he discovered Admiralty Island, made a thorough survey of its coastline and traded with the natives, whom he found very friendly. Obviously the breastplate now in the UNIVERSITY MUSEUM could have been brought on board Vancouver's ship, the Discovery, in January, 1792, while she lay at Tahiti. It could have remained on board during his subsequent explorations until it was left with the inhabitants of Admiralty Island in 1793.

One must consider also the possibility of its having been carried by some whaler at a later period. Hunting the sperm whale in the South Seas was an industry developed as early as 1790, but whalers of that period could have had no incentive to go north. It was not until 1835 that ships went after the bowhead in the waters off the northwest coast of North America; not until 1848 that they began to follow the whale through Bering Strait into the Arctic Ocean. After 1835 they sometimes hunted the sperm whale in the South Seas

A lady of Tahiti wearing ornaments like the one described in this article.
From Cook's Voyages.

and the bowhead in the northern Pacific, in Bering Sea, and the Arctic at different stages of the same voyage.

It is not likely, however, that the breastplate that has been described here was carried on a whaler. William Ellis, the representative of the London Missionary Society who resided in the Society Islands, in which group Tahiti is the largest and best known island, from 1817 to 1825, has left us an account of the course of events in the islands under missionary influences which shows how rapid was the decay of native custom during even that brief period. The images of the gods, except a few which the missionaries sent home as curios, were destroyed, penal regulations were made against such practices as tattooing, everything, like this gorget, which could recall and help to perpetuate time honoured practices, was discouraged out of overt existence. It is extremely unlikely that any of these breast ornaments were left in the fourth decade of the last century, which was the period when whalers began to ply between the southern and the northern waters of the Pacific Ocean.

If, unwilling to credit unreservedly the testimony offered by the Alaskan natives of today, we continue the search for other possible means by which the ornament in question may have travelled to Admiralty Island, we find that there were traders who sailed, during the years following Cook's discoveries, from Chinese and East Indian ports to points on the northwest coast of America for furs. Some of their ships found their way into eastern Polynesian waters; one, at any rate, driven by stress of weather, touched at Tahiti in 1798. But this was an exceptional case. She had been bound from Macao for the Northwest Coast, had reached Kamchatka and had been driven south and east by storms. She did not proceed on this occasion directly north from Tahiti, but went to New South Wales to refit.[1]

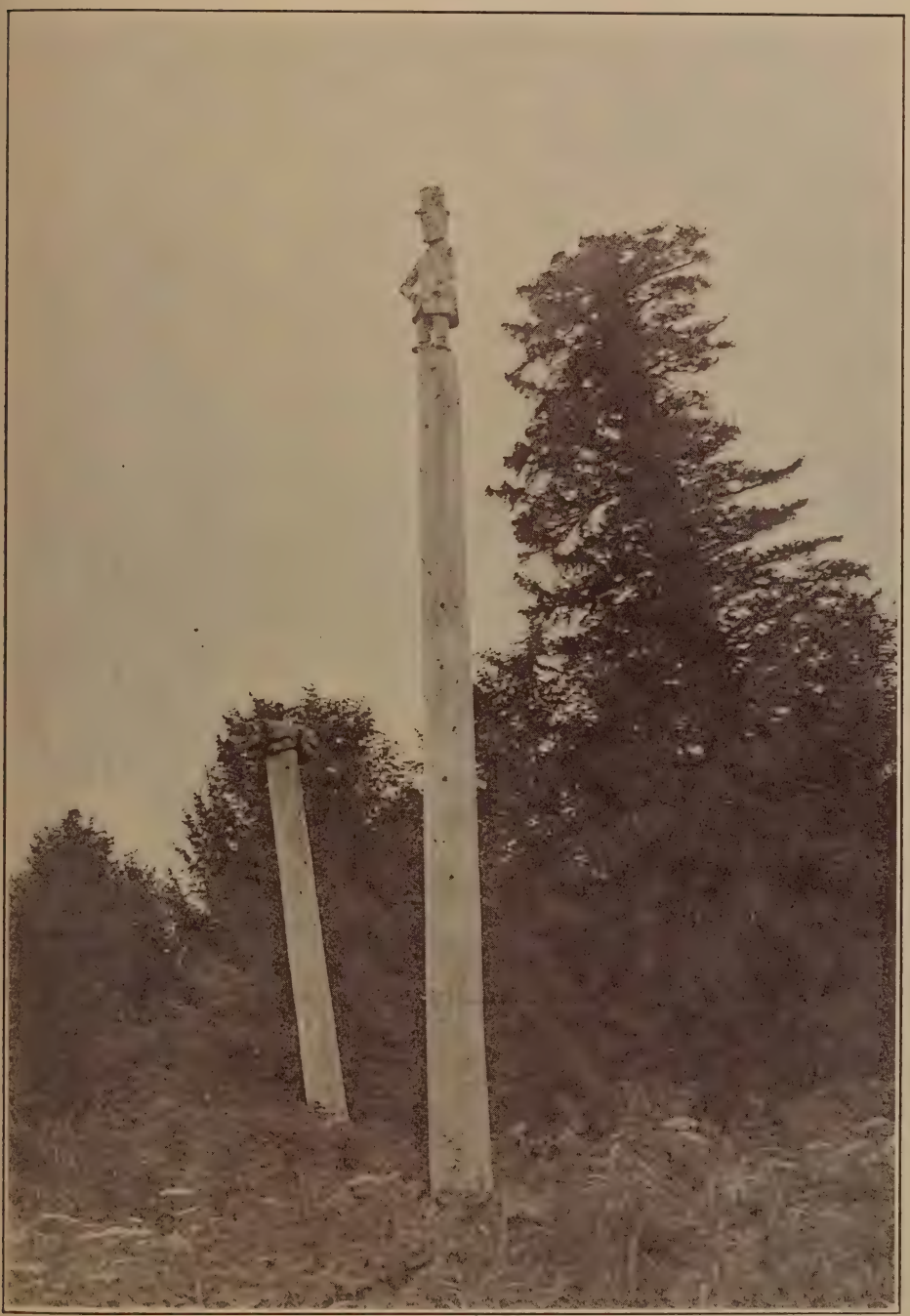
The Society Islands were not so conveniently situated as the Marquesas for ships sailing northwards through the Pacific. No official explorer, Russian, French, and English, among those who were completing Cook's work of discovery in the Pacific during the first three decades of the nineteenth century could well have been the intermediary of this striking example of a contact between two distant and widely differing cultures, for either they did not touch at both points or they only touched at them in the wrong order. Wilkes, of the United States Exploring Expedition, satisfies the necessary

[1] W. Ellis, Polynesian Researches, Vol. ii, p. 23, etc. London, 1853.

conditions of space and time in this respect, but he reached Tahiti on his way to the Northwest Coast only in 1840 and his remarks on the cultural conditions he found in Tahiti form an interesting commentary and supplement to Ellis's observations which refer to a period closing about sixteen years earlier.[1] Wilkes gives, for example, a vivid description of the costume of the son of the chief of the seven judges set up by the missionary inspired government of the island. This costume comprised a most incongruous array of European fashions and it was worn on a certain festal occasion by the son of the leader of the Tahiti for Tahitians party, who himself appears to have become completely Europeanized in all such matters. It is in the last degree improbable that any gorget of featherwork adorned in those days any even antiforeign breast which sweated proudly under a peajacket on ceremonious occasions or wore unceremoniously on others an unbuttoned cotton shirt that maintained uncertain contact with a loin cloth or trousers of material woven on a Manchester loom.

To pass now to the native tradition concerning the origin of this notable featherwork decoration. The following passage is a quotation from a letter of Mr. Shotridge to the Director, dated July 11th, 1925: "The breast ornament . . . is included in the Angoon Collection. . . . The origin of the old Deshu-hit-ton 'Raven Cape' . . . is almost unknown. The late owner before she died had offered no more [information] than that the old leaders of their house had maintained to the last a great esteem for the object and they had boasted of having a possession which was uncommon. The old men were even quoted to say: We show our esteem for the Raven Cape before the people because it is the work of the people of another world. . . ." It may be well to note here that Angoon is the name of an old Tlingit town on Admiralty Island. The northern part of this island lies in the mouth of the so called Lynn Canal; a short distance to the northwest of this fjord or deep inlet lies the settlement of Kluckwan. From a native resident of that settlement, a certain Mrs. Benson Yisyat, Mr. Shotridge obtained some further information about the strangely renamed Raven Cape tending to confirm the probability of the gorget's having been received by the Tlingit of Angoon indirectly from the hands of some person in Cook's company or directly from someone in Vancouver's.

[1] Narrative of the United States Exploring Expedition (1838–1842). Charles Wilkes, U. S. N. Vol. II, Chapters 1 and 2. Philadelphia, 1849.



Effigy said to be a traditional image of Captain Cook on Tongass Island,
Southwestern Alaska.

It appears that when she was quite young Mrs. Yisyat was a member of a party which visited the Deshu-hit-ton clan at Angoon to witness an important ceremony which involved the wearing of the Raven Cape by some representative of the clan. Struck by the foreign appearance of this strange vestment, of which she had previously heard, she asked questions about it and was told that it came from the Kutaeha people "through the hands of the first white man who came to our land." Mr. Shotridge's informant is not quite clear as to who these Kutaeha people were, but thinks that Kutaeha "was a place somewhere in the neighbourhood of the Giyakquan (Aleut people) beyond Copper River." It of course is quite possible that a party of natives from that region might have got some such object in trade from Cook himself or some member of his party and traded it further on during a coasting trip to Tlingit country.

Now it appears from a passage in the notes obtained from another informant whose name is not given by Mr. Shotridge that "the strange party in question [the Kutaeha people] made its visit to this land in company of the first man of the sun." According to this person the whites were referred to as men of the sun. On this Mr. Shotridge comments that it is very likely that the first man of the sun was Captain Cook, "who, according to the Southern Tlingit, was the first white man seen upon this land." But, as we have seen, it does not appear that Cook made a landing on Admiralty Island while we know that Vancouver did. If the transfer of the gorget was made by a party of natives from a distance in the company of a white man, it seems more likely that the latter may have been Vancouver or some member of his party who was guided to Angoon by foreign Indians or Eskimos, accustomed to trading with the Tlingit of Admiralty Island. On the other hand it is to be noted that Mrs. Yisyat does not in the passage quoted speak of the trading party as including white men. She says merely that the Raven Cape "was brought to this land by a party [which] received a handsome price for the object from the Deshu-hit-ton clan of Angoon." This statement is indecisive as to the choice between Cook and Vancouver; either might have parted with it to native traders before it was brought to Angoon. Mrs. Yisyat's statement, quoted in the preceding paragraph, that the gorget came to the Angoon people "through the hands of the first white man who came to our land," though ambiguous in itself, evidently is intended to be taken literally as meaning that the first white man was the actual inter-

mediary in the transaction, since she continues, quoting her own Deshu-hit-ton informant: "This first white man was not slow to find out that the Deshu-hit-ton would get a thing which its men desired regardless of any demand, and the white man got his price indeed. Those men of old, nowhere had they seen men with skin fairer than even that of our maidens and appearing with such luring (sic) surroundings." The price paid in "furs or pelts of sea and land animals" for the breastplate is said to have been "equal to the value of four male slaves." Mrs. Yisyat's statements, taken together, thus tend to the same effect as that of the anonymous informant of Mr. Shotridge, namely, that the bringer of the gorget to the Tlingit was Vancouver. If this authority is correct in his identification of the men of the sun with the white man, it may be that he and his commentator, Mr. Shotridge, are at cross purposes and referring to different individuals. In other words, the former may have had in mind the first white man who landed on Admiralty Island or reached the neighbourhood of Angoon, while the tradition of the Southern Tlingit cited by the latter, since it is evidently more general in its application, may refer to the first white man who appeared on the coast; which latter, so far as the possibility of his bringing in a Tahitian object is concerned, would have been Captain Cook. If there is justification for narrowing the range of possibilities to these two explorers, and if there is any ground for a choice as between the two, it seems that Vancouver or some member of his company is more likely to have brought the gorget to the Tlingit than Cook.

There is in the Tlingit country a kind of monumental embodiment of the tradition concerning Captain Cook's visit to the Northwest Coast. "Speaking of the man of the sun," says Mr. Shotridge, "the spirit of Gemp-kuk (Captain Cook) was one of the important objects in the tradition recorded on the totem of the Tae-kuae-di of Tongass. To this day the image of the great explorer, adorned in the Prince Albert style of coat and a great tall hat, can be seen standing prominently among the many old totem poles . . . on Tongass Island." In the photograph reproduced here, which was taken by Mr. Shotridge, Gemp-kuk appears in all his curiously anachronistic glory. Clearly the monument was erected long after the event it claims to record, and the model for the forgotten features and costume seems to have been a composite mental picture of the type of the white men who appeared later, grim with heavy sculptured beards and bearing, not memorials of joyous adventure among

the carefree islanders of the south, but tracts and bibles to complicate the simple morals of a sturdier northern folk. Tongass Island is near the entrance to Portland Canal on the British Columbia borderline and so is much nearer than Admiralty Island to the first recorded landing place of Cook on the Northwest Coast, Nootka Sound in Vancouver Island. It might have been supposed that the tribal memory of the Tongass Islanders would have preserved a different presentment of the great explorer. Perhaps his well known humanitarian impulses and liberal mind would not be outraged if his shade could know that Mr. Shotridge at first sight mistook his effigy for that of Abraham Lincoln. I feel sure that he could not forgive the Tlingit artist the chimney pot hat and still less the frock coat so long imposed on guiltless English speaking generations by the well meaning example of a blameless Prince Consort.

We know little enough of the use to which this breast ornament was put either before its transmogrification into a Tlingit cape or after. Probably never numerous, seven of these objects are known to be still in existence in museum collections besides the one figured here: one in the Australian Museum at Sydney, two in the Museum für Völkerkunde in Berlin, one in the Municipal Museum at Berne, and three in the British Museum.[1] The example in the Australian Museum was purchased from the family of Captain Cook. Cook must have been familiar with the appearance of these objects from the time of his first voyage. In the official account of this voyage[2] one of them is figured and described as "a military gorget." Whether or not this is a picture of a gift to Cook there is no means of knowing. It is not the same as the specimen now in Sydney. A picturesque incident of his third voyage is described by himself and illustrated in the Album of plates to that Voyage by one of Webber's charming drawings. On Monday, September 8th, 1777, Cook writes: "I . . . went with him [Otu, Pomare I] to his father's where I found some people employed in dressing two girls with a prodigious quantity of fine cloth [bark cloth or tapa], after a very singular fashion. The one end of each piece of cloth, of which there were a good many, was held up over the heads of the girls, while the remainder was wrapped round their bodies under the armpits. Then the upper ends were let fall and hung down in folds to the ground, over the other, so

[1] Occasional Papers of the Bernice Pauahi Museum, Honolulu, Part I, pp. 3, 20, 35, 46, and Pl. II.

[2] Cook I (Hawkesworth), ii, Pl. 8.

as to bear some resemblance to a circular hoop petticoat. Afterwards, round the outside of all, were wrapped several pieces of differently coloured cloth, which considerably increased the size; so that it was not less than five or six yards in circuit, and the weight of this singular attire was as much as the poor girl could support. To each were hung two *taames* or breastplates, by way of enriching the whole and giving it a picturesque appearance. Thus equipped they were conducted on board the ship, together with several hogs and a quantity of fruit, which, with the cloth, was a present to me from Otoo's father. Persons of either sex dressed in this manner are called *atee;* but, I believe, it is never practised except when large presents of cloth are to be made."

This Otu, or more correctly Tu, was ruling chief of a district on the northern side of the larger of the two peninsulas into which Tahiti is divided. Afterwards, under the name of Pomare he became by conquest lord of the whole island, he and his successors of the same family subsequently extending their sway over the whole archipelago. In accordance with Tahitian custom his father had abdicated on the birth of an heir, continuing however to exercise authority as regent until such time as his son was judged capable of assuming the actual authority belonging to his chieftaincy. The gift of cloth with its accompaniments was therefore in a sense a royal gift, since Tu and his father belonged to the class of high chiefs whose persons were sacred and who claimed kinship with the gods. The breastplates referred to in Cook's story must have been such as were worn only by persons of this class and could only have passed into Cook's hands, as they appear to have done with the cloth, because he was regarded as at least the equal of this exalted personage.

The breastplate figured here also was originally the property of some member of this class of high chiefs, the highest aristocracy of the island, since its adornments include red feathers, sacred to Oro, the war god who received the chief worship of most Tahitians. Such feathers could be worn only by persons of this class, descendants and kindred of the gods.

We have seen that Cook described these breastplates as military gorgets. Though the term is still commonly used for the purpose, it is not properly applicable, since they were worn upon the breast and not as protection for the throat. Ellis's description of a warrior's costume includes this feature. "The Tahitians," he says, "went to battle in their best clothes, sometimes perfumed with fragrant oil

and adorned with flowers; and whether they wore only the light tiputa or the cumbrous ruuruu, which left only the arms at liberty, the whole was bound round the waist with a finely braided sash or girdle. On the breast they wore a handsome military gorget, ingeniously wrought with mother-of-pearl shells, white and coloured feathers and dog's hair."[1]

This practically sums up what we know about these breastplates. The lightness of their construction excludes the possibility of their having been used for protection, although forming, like the Hawaiian feather cloaks, part of the costume of a chief. But they were not the only part of a warrior's costume in Tahiti which could not only not have been a protection but must have been a positive encumbrance. Men of importance wore in battle an enormous nodding headdress which seems to have had no other use than to draw the enemies' attention to them.[2] The tiputa mentioned in the last paragraph was the poncholike oblong of tapa which was the customary upper garment of the higher classes; the ruuruu was "a kind of wooden armour for the breast, back, and sides, covered with successive folds of thick cloth [tapa] bound on with ropes. Over this a costly cloth was spread."[3]

What we have hitherto learned about the use to which this far travelled breastplate was put when it reached Alaska is even less than our knowledge of its employment in Tahiti. It was put to a ceremonial use of undefined nature. Our Alaskan informant is quoted as saying: "We were visiting Kal-yaku, who was at that time the master of Took-ka-hit (the great house of the clan). Incidentally we were there to witness an important ceremony at Angoon, in which the Raven Cape was put to use." It was the property of the clan, and not of any individual, being referred to in the first place as the Deshu-hit-ton cape. Also we have somewhat more definite information on this point from Mr. Shotridge, who says: "I have been informed that the Raven Cape was used by different house groups of the Deshu-hit-ton during important affairs of the clan, hence it can safely be classed as a clan object." The communal nature of its ownership as well as the estimation in which it was held by its owners is emphasized in the statement by Mr. Shotridge that it "well deserved a high name . . . the name Raven, the emblem of the great Tlhigh-naedi, the moiety of the Tlingit division to which

[1] Polynesian Researches, I, p. 301.
[2] *Ibid.*, pp. 299–300.
[3] P. 301.

the clan belongs"—moiety being a name for each of two larger divisions comprising clans into which some American and other aboriginal societies are divided. Someone else told Mr. Shotridge that the breastplate might well be "compared with those objects improvised by the great Raven, as described in the legend." Round about Bering Sea, on both sides of it, Raven has a great place in mythology and cosmogony as creator or organizer of the universe. So the aura of divinity which hung about the breastplate at the beginning of its travels was regained at their end, if Raven can be regarded as in some sense divine. The esteem, if not reverence, in which the Tlingit of Angoon held their acquisition is explained on the grounds that "it had been the work of unknown hands." What is beyond our horizons smacks always of the wondrous if not, according to the degree of our enlightenment, of the supernatural. Witness that altar set up by the Athenians to the unknown god.

Mrs. Yisyat's host at Angoon told her that the breastplate was the "handiwork of the Kutaeha people." Neither she nor Mr. Shotridge appears to know much if anything about these people. We have seen who Mrs. Yisyat believed they were. Is it possible that we have a Polynesian name preserved in this word, whose sound is strange both to the collector and his principal informant, and transmitted by a European intermediary to this remote Alaskan people? It would hardly be more strange than many another strange passage in the half deciphered story. The word has of course an obvious resemblance to the name of the people inhabiting the shores of Cook's Inlet, the Khotana, but whether Polynesian or Athapascan or something else, the linguistic bearings suggested by the word would take me too far afield at present.

The name of the Tlingit personage through whom the breastplate was acquired for the Deshu-hit-ton is given provisionally by Mrs. Yisyat in the following passage, quoted by Mr. Shotridge: "I . . . either missed at the time I listened to the story or [I have] forgotten since the personal name of the master of the leading house group of the clan who made the purchase of the Raven Cape possible, but it is safe to say that it was A-yaha, Lake-Shore, because he was in truth, the first man who made himse.f prominent among the Deshu-hit-ton, and his name [was] connected with the foundation of the important history of the clan." The reasoning is not perfect, but it seems clear at any rate that the person who got the credit for endowing the clan with this treasured possession was the most

prominent head of a Deshu-hit-ton family at the time. It "was always kept," says Mr. Shotridge, "by the leading family or house group," of the Deshu-hit-ton.

The breastplate has for its groundwork plaited or braided sennit of coconut coir. This is stiffened and strengthened by a number of closely laid pliable twigs or withes bent to follow the outlines of the breastplate. These are crossed by short twigs, all being bound together and to the foundation with twine made of coconut coir. The dark feathers which cover the greater part of the foundation are laid on in three rows, separated, and, except for the outermost row, bounded on both edges by rows of sharks' teeth. These feathers are tied in small bunches at the quill end and the bunches are caught between two stout cords which are tied down tightly between every two bunches to the sennit foundation. There are, strictly speaking, more than three rows of these dark feathers, the outermost being composed of two overlapping layers. The lighter coloured (red and yellow) small feathers are laid over the dark ones; wherever this occurs the dark feathers have been placed in overlapping layers, one of which is cut away enough to show the red and yellow. These small feathers are laid on in much the same way as the larger ones, except that the bound ends of the small bunches are laid between slender slips split from what appears to be cane or coconut leaflet midribs. A continuous fine cord binds these slips together by means of three half hitches taken between every two bunches of feathers. The whole is tied down at intervals through the underlying dark feathers to the sennit foundation. The sharks' teeth are fastened just below the perforations of their broad ends between two stouter slips of a similar material to that used for the small feathers by means of a cord passing through the perforations and passed spirally around the slips. The cord which fastens the teeth to the foundation also passes through these holes in the teeth.

The goat's (or dog's) hair fringe is composed of tresses wrapped as to the extremity which passes into the framework of the breastplate with fine cord of coconut fibre. The spiral winding is so arranged as to form a loop at the end which is inserted into the framework. This loop has no structural connection with the latter and must be merely ornamental. This fact, together with the other that in the winding of each tress the fibre cord is interrupted with a varying number of bands formed of those extremely fine braids of human hair for the manufacture of which the Tahitians were famous, seems

to indicate that these carefully prepared tresses of goat's or dog's hair were used for some other purpose as well in which the ornamental wrapping would have been visible.

The wrapped portion of the tresses is laid on the back or under side of the sennit foundation crossing the long and parallel with the short twigs used for strengthening. They are held against this by two long slender withes which pass, parallelling each other, around the outer edge of the frame. To the outer one of these the tresses are fastened by means of a spiral winding similar to that which secures the red and yellow feathers to the other face of the breastplate. The inner bent withe serves only to keep the bound ends of the tresses flat against the framework; they are not attached to it.

At the upper end of each branch of the horseshoe shaped ornament and near the outer edge of it is a rosette formed of small red and blue feathers tied to a circular foundation of withes. Commonly these rosettes, two or three to a side, surrounded a piece of mother of pearl shell; in the case of our breastplate the shell is lacking. The space which might have been occupied by another rosette towards the inner edge of each side is covered by the breast of a bird with iridescent blue down.

The inner side of the horseshoe or rather hairpin curve of the breastplate is finished off with a narrow double band of woven cocoanut fibre sennit. The technique of the featherwork of the Tahitian breastplates differs completely from that employed in the making of the Hawaiian feather cloaks.[1]

By way of a footnote to this story of the strange linking of two diverse and far sundered cultures let us place here the record of two other examples of objects whose drift half round the world would have been impossible before the restless Caucasian had begun in the course of his far flung wanderings to bring the ends of the world together. The first of these was carried in a direction the exact opposite of that in which the breastplate was brought, and the outline of its history which is all that we can divine is to be traced in the material of which it is made and the form given to it by the artificer who shaped the material in accordance with an alien tradition. It is a war club made by a Samoan from the tusk of a narwhal killed in the Arctic seas. The story of this club has already been told in a study of Club Types in Nuclear Polynesia[2] made by William Churchill on a large number of clubs in the collections of the

[1] Two Hawaiian Feather Garments, Museum Journal, March, 1923.

[2] Carnegie Institution, Washington, 1917. Pp. 162–164 and Pl. VIII, a.

A box of bamboo found among the Eskimo at Cape Prince of Wales on Bering Strait, Alaska.

UNIVERSITY MUSEUM. Speaking of the activities of the whalers in the Pacific which we have already referred to, he says: "In the summer the fleet went northabout after the right whale in Bering Sea and the Arctic; in the winter of the northern hemisphere it made a new summer off New Zealand after the Antarctic whale. In each voyage between the ice of the north and the ice of the south the whalers scattered over the equatorial waters and followed the fiercely fighting cachalot. . . . Arriving shorthanded in the Pacific, the whalers filled up their forecastles with islanders from Samoa and Tonga and Fiji in the south. . . . It was surely a Samoan sailor who first came into possession of this horn of the unicorn of the sea and saw at once how well fitted it was to the exercise of his handicraft. . . . It is easy to picture him in the lazy hours of cruising . . . as he busies himself with holystone and shagreen to rub the twists out of the stalk of ivory, and with the sheathknife as he carves the lug upon its end in his own country fashion. . . . Before he had had the time to complete his club by making the hole through the lug whereby it might be suspended by a becket of sennit, the chance of his voyage led him to Santa Cruz. One does not associate the thought of gentle traffic with that savage island; no Samoan would ever give up peacefully such a club to men whom he could not trust with arms in their hands; there is blood upon the club without a doubt." The club was obtained in the Melanesian island of Santa Cruz in 1891.

Finally the trinket box figured here made of a section of the internode of a bamboo stoppered at both ends with Alaskan wood was obtained by the Director of the Museum from an Eskimo at Cape Prince of Wales in 1905. Its surface shows some incised drawings in characteristic Eskimo style etched through the silicious cuticle of the bamboo as well as three more deeply incised bands of linear decorations including two varieties of zigzag ornament. Like that of the club, then, the material is alien to the culture of the workman who fashioned it; unlike the club it was probably fashioned by that workman at home on his native beach where the material came to his hand by a lucky chance from no place nearer than distant Japan at nearest; unlike both club and casket, the breastplate which is the leading character in this chapter of accidents was brought ready made of alien material by an alien craftsman to a new and strange yet not altogether dissimilar sphere of employment in land foreign both to its maker and his material.

THE EXPEDITION TO PALESTINE

WORK upon the excavations at Beisan, having been interrupted for a year, was resumed upon September first. The season from November to March, inclusive, is the time of rains in the Jordan Valley but it is also the cooler and more salubrious season. The rains are not heavy and at no period continuous for many days at a time. Work may proceed during this season with little interruption and with more comfort and with greater energies than in the dry and hot season from April to September.

The Field Director of the Expedition, Mr. Alan Rowe, has formed the nucleus of his party of excavators from among Egyptians experienced and handy in the work, having had long training, either on our own excavations at Memphis, Thebes, Dendereh and Giza, or else with one of the other expeditions from America or Europe that have during the last twenty years been at work at different sites in the Nile Valley. The transportation of this nucleus of trained workmen from Egypt to Palestine is both convenient and effective in organizing gangs of native labour. The native of Palestine though perhaps not less willing as a worker under European or American discipline and in scientific organizations has much less experience. The majority of Mr. Rowe's workmen are however recruited without much difficulty from the local Palestinian village of Beisan in the Plain of Jezreel, about seventeen miles from Nazareth.

The reorganization of the Expedition has been completed by the appointment of Mr. G. M. Fitzgerald, M. A. Oxford, as principal assistant in archaeology. Mr. Fitzgerald was a member of our Beisan expedition in 1922. He was also a member of the Joint Expedition to Ur in 1923–24 and has been, besides, Senior Student in the British School of Archaeology in Jerusalem.

Mr. E. J. Davies, formerly assistant surveyor on the Palestine Government Surveys, has been appointed to the post of surveyor on the Expedition. Mr. Davies is an accomplished Arabic scholar and an experienced surveyor and practical architect. He has a special knowledge of the history and archaeology of Palestine gained at first hand during his studies of the topography and the geographical features of the Holy Land. The other members of the staff who will serve under Mr. Rowe are also experienced in their several departments.

The tasks that the Expedition has before it are both interesting and formidable. The great Tell or Acropolis of Beisan will again be the scene of the principal labours of the Expedition. The conditions on that Tell naturally become more complicated, more delicate and more refractory as lower levels are reached and earlier periods of occupation have to be disentangled from the mass. Though much more involved and difficult, these conditions become more and more absorbing. At the level to which the excavations should arrive in the course of the present season there should be found structures corresponding to the period of Saul's kingship and his tragic death on Mt. Gilboa nearby, a period during which the great fortress city of Bethshan (Beisan) was in the hands of the Philistines, as indeed it was for most of the time of the Hebrew struggles for supremacy in Palestine. The point where the excavations have arrived, therefore, is one to which unusual interest attaches and the further progress of the work will be watched with an uncommon interest.[1]

The financial support of the Expedition to Beisan is provided in a large measure by a generous contribution from Mr. John D. Rockefeller, Jr., a contribution that insures the continuance of the Expedition through a period of three years.

[1] Since this was written and while the JOURNAL was in press, a cable despatch was received from Mr. Rowe announcing the discovery of a stela depicting Ashtaroth with an altar and objects pertaining to the worship and cult of that goddess. The despatch contains a reference to First Samuel, 31. "And they put his armour in the house of Ashtaroth: and they fastened his body to the walls of Bethshan."

It is evident from the cabled despatch that Mr. Rowe believes that he has discovered traces of the Temple of Ashtaroth where the Philistines placed Saul's armour after the battle on Mt. Gilboa and after they had stripped his body and the bodies of his sons.

A second cable despatch from Mr. Rowe sent five days later than the first and received after the foregoing part of this note had been put in type announces the discovery of the actual temple of Ashtaroth.

THE JOINT EXPEDITION TO UR

PLANS have been completed for resuming the excavation of Ur in lower Mesopotamia on the first day of November. Mr. Woolley remains Field Director and Dr. Legrain again joins the staff as cuneiform scholar and second in command. Mr. Henry Mallowan, M.A. Oxford, who has specialized in Ancient History and Babylonian Archaeology, has received the appointment of assistant archaeologist. We cannot yet give the name of the surveyor and architect who will take the place of Mr. Newton whose admirable work on the Expedition will be remembered and whose death in Egypt on Christmas Day last year has been regretted by all connected with these explorations.

The work contemplated by this Expedition for the coming season consists of a continuation of the clearing of the Royal Area near the Ziggurat and the Moon God's official residence. The burial places of the early Kings of Ur, though by no means to be reckoned among the likely discoveries, are a feature of the ancient city that compels attention and curiosity. Not a trace of these has been found and they may never be recovered and the feeling of the excavators with reference to them is one of perplexed uncertainty rather than of expectation. The great antiquity of the site and the natural changes in the condition of the ground make the location of the Royal Tombs a matter of great difficulty and obscurity.

All who read Dr. Legrain's article in the last JOURNAL will realize that the conditions under which work is conducted at Ur, while permitting of amenities, are attended by trials as severe as any expedition in the East has to endure. Mr. Woolley's reports have shown how in spite of these conditions, the work has been prosecuted with energy and has achieved surprising results, both in the extent of its operations successfully carried out, in the magnitude of the ground covered, and in the number of antiquities registered.

Meantime, during the summer of 1925, the objects discovered in the last season's work, of which the most important is the great stela of Ur-Engur, have been displayed according to previous arrangement in the British Museum, where they were inspected by many visitors who during the summer season come to London from all countries of Europe and America and of the World. These objects will be shown in the University Museum during the coming winter.

The financial support of the Expedition is provided half by the University Museum and half by the British Museum. Payments on the part of the University Museum on account of the joint fund for the coming campaign are derived from a generous contribution of Mr. Edward B. Robinette, who has provided in this way for two years' work of the Expedition. It is the expressed wish of Mr. Robinette that the name of Dr. Charles Custis Harrison, President of the Museum, be associated with the Joint Expedition to Ur. With this thought in his mind, Mr. Robinette, in making the aforesaid provision, coupled therewith the following statement of the purposes that he had in mind.

> "As Mr. Harrison is so greatly interested in this Expedition and as it promises to be one of the most important expeditions the University Museum has ever had in the field, I would like, if possible, if Mr. Harrison's name could in some way be used so that it could always be associated with the work of the Expedition."

The Board of Managers in thanking Mr. Robinette for his generous gift further expressed itself as follows:

> "*Resolved*, That the Board heartily approves of Mr. Robinette's suggestion that Dr. Harrison's name be connected with the Ur Expedition in a manner to be devised."

A GEORGE LEIB HARRISON FELLOWSHIP FOR THE MUSEUM

The President has devised that a George Leib Harrison Fellowship shall be awarded by the Museum to a student in archaeology who shall have prepared himself for advanced studies and who shall have otherwise proved himself adapted to the work. The successful candidate will be expected to spend at least a part of the year in studies abroad, and it will be provided that he shall at times be attached to one or another of the Expeditions in Mesopotamia, Palestine and Egypt. In the creation of this Fellowship an unusual opportunity is offered to young men of ambition, capable of pursuing a course that may open for them the way to a career in one of the most humanly attractive of scientific professions.

MUSEUM NOTES

ACCESSIONS.

By Gift.

From Miss Lily Place, the Museum has received as a gift 11 Chinese embroideries, 2 pieces of Batik work from Java and 2 Arabic inlaid boxes.

From Mrs. James Harris Knowles and Mrs. Mary Lloyd Serril, a brick from the Chinese wall.

From Mr. K. Z. Tung, two pieces of Chinese embroideries.

From Mr. Alfred M. Collins, the Museum has received an extensive collection from Central Africa, obtained by him during his recent expedition into that region.

From Mr. John L. Cox, a collection of Eskimo string figures.

From Mr. A. J. B. Wace, a collection of potsherds from Thessaly.

From Miss Caroline Sinkler, three albums of Egyptian photographs.

From Mrs. Kingsmill Marrs, a collection of Egyptian photographs.

From Mrs. A. M. Hexamer, a collection of photographs of the Near East.

From Mrs. A. Eugene Benners, Jr., a copy of Racinet's *L'Ornement* and Calvert's *Moorish Remains in Spain.*

By Purchase.

The following accessions to the Museum collections have been made by purchase since the last number of the JOURNAL went to press.

An Old Empire Egyptian statue from Sakkara.

A head of a statue found at Sakkara.

A bronze statuette of the goddess Neith.

9 pieces of Chinese sculpture of the T'ang Dynasty.

5 Chinese frescoes of the T'ang Dynasty, found in Honan Province.

An Arabic bronze vase inlaid with silver.

A ceiling panel from the 16th century Palace of Haft Dast at Isfahan.

2 Lekythoi found at Eretria on the island of Euboea, Greece, in February, 1893.

A Tanagra figurine found on the island of Euboea, Greece.
2 Inca gold vessels.
An Aztec stone head.
A Huron Indian woven sash.
An ivory carving from Ancient Benin.
A collection of 55 ethnological specimens from West Africa.

ELECTION OF MR. JOHN C. BELL.

At the meeting of the Board of Managers held April 17, Mr. John C. Bell was elected to take the place of Mr. Sabin W. Colton, Jr.

APPOINTMENTS TO THE STAFF.

Miss Helen E. Fernald, formerly Head Docent in the Department of Education, has been transferred to the post of Assistant Curator in the Section of Far Eastern Art. Mrs. Loring Dam, formerly Assistant Docent in the Department of Education, has been appointed to the head of that Department.

Mr. Alan Rowe, recently a member of the Harvard University-Boston Museum of Fine Arts Expedition to Egypt, and Acting Director of that Expedition in the absence of Dr. Reisner, has been appointed Field Director of the Museum's Expedition to Palestine and resumed excavations at Beisan on the first of September. Mr. Rowe was formerly a member of the Museum's Expedition to Egypt and also a member of its Expedition to Palestine.

RESIGNATIONS.

Dr. Clarence S. Fisher resigned the position of Curator of the Egyptian Section in January and Dr. Nathaniel Reich has given up his position as an assistant in that Section in order to accept the appointment of head professor of Egyptian and Hebrew at Dropsie College.

THE UR EXPEDITION.

The Joint Expedition of the British Museum and the University Museum brought to a close the work at Ur for the season 1924–25 at the end of March and Dr. Leon Legrain returned to the Museum on June 17, having spent the winter at Ur, engaged upon the work of the Expedition. The collections assembled during the season 1924–25 were prepared for

exhibition first in the British Museum and afterwards in the University Museum, where they will arrive late in the autumn. The Expedition expects to resume operations at Ur on the first of November.

CHINESE EXHIBITION.

The collections of Chinese art in Charles Custis Harrison Hall were entirely rearranged in the spring of this year and a number of new pieces added. The result was a new exhibition of Chinese art and a number of guests were invited to a private view on May 22. The following day the exhibition was opened to the public and remains a permanent feature of the Museum.

PUBLICATIONS.

A portfolio containing 25 plates, mostly in colour, and showing selected examples of Maya painted and modelled pottery, was issued during the summer. This work, when completed, will contain 100 plates, including the examples of painted Maya vases in the University Museum together with those in the other Museums of America and Europe. It will form a comprehensive collection and contain a thorough treatment of the Art pottery of the Mayas.

An important publication on the Culture of the Babylonians consisting of a volume of text and a volume of plates by Dr. Leon Legrain has been issued during the summer. The volume of text is now ready for distribution and the plates will be ready in the course of a few months.

BUILDING PLANS.

The architects have been instructed to prepare finished drawings for the Fourth Section of the Museum building, to occupy the ground immediately to the eastward of the sections already built.

LECTURES.

The following names are among those of lecturers who will be heard in the Auditorium on Saturday afternoons during the coming season. Programs for the Fall Course which opens on November seventh will be sent to Members during October.

Dr. Ananda K. Coomaraswamy, India.
Dr. Asa C. Baldwin, Alaska.

Dr. Esther Boise Van Deman,	Rome.
Mr. Michael Dorizas,	The Balkans.
Major F. A. C. Forbes-Leith,	By Motor to India.
Rosita Forbes,	Abyssinia.
Mr. Carveth Wells,	The Mediterranean.
Mr. Gene Lamb,	Northern Thibet.
Mr. David Lattimore,	China.
Prof. Elmer W. Smith,	Palestine.
Dr. Walter Edwin Peck,	Afoot in Italy.
Dr. William Montgomery McGovern,	The Amazon.
Prof. Jean Baptiste Beck,	Mediaeval Music.
Dr. Charles Upson Clark,	Spain.
Dr. O. Siren,	China.

HIGH SCHOOL LECTURES.

The following lecture program has been arranged by the Department of Education for the High Schools of the City and vicinity, for Tuesday afternoons at 3.30.

October 27, The Crusades.
November 3, Pausanias Goes Sightseeing.
November 10, Roman Life.

ELEMENTARY SCHOOL LECTURES.

The lecture program for the Elementary Schools as arranged by the Department of Education, the lectures being given on Wednesday afternoons at 2.30, is as follows:

September 23, The Crusades.
September 30, Athens the Glorious.
October 7, An American Indian.
October 14, Japan and Its People.
October 21, Hawaii and the Philippines.
October 28, Life on the Amazon River.
November 4, China and Its People.
November 11, Roman Life.
November 18, The Great World of Africa.
December 2, London of Yesterday and Today.
December 9, Alaska.

FORM OF BEQUEST

I give and bequeath to the Trustees of the University of Pennsylvania the sum of .....dollars, in trust for the uses of the University Museum. (Here, if desired, specify in detail the purposes.)

SPECIAL NOTICE

In order that The University Museum may give appropriate recognition to the substantial gifts which have been already received, and which will hereafter be donated or bequeathed for the development of its resources and the extension of its usefulness, the Board of Managers have adopted the following classification for contributors and members, and have resolved that the names of the donors of aggregate sums of $25,000 and upwards, in cash, securities, or property shall be inscribed upon a suitable tablet or tablets, to be properly displayed in the Museum.

There shall be five classes of Contributors designated as follows:

Benefactors,	who shall have contributed the equivalent of	$50,000
Associate Benefactors,	" " " " " "	25,000
Patrons	" " " " " "	10,000
Associate Patrons,	" " " " " "	5,000
Fellows	" " " " " "	1,000

There shall be four classes of Members designated as follows:

Life Members,	who shall contribute	$500
Contributing Members,	" " "	100 annually
Sustaining Members,	" " "	25 "
Annual Members,	" " "	10 "

Contributors and Members are entitled to the following privileges: admission to the Museum at all reasonable times; invitations to receptions given by the Board of Managers at the Museum; invitations and reserved seats for lectures; the MUSEUM JOURNAL; copies of all guides and handbooks published by the Museum and free use of the Library.

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YALE UNIVERSITY MUSEUM
ANTHROPOLOGICAL
SECTION

THE ZIGGURAT OF UR, RESTORED AFTER EXCAVATION

Drawn by Mr. F. G. Newton

UNIVERSITY OF PENNSYLVANIA

THE MUSEUM JOURNAL

PUBLISHED QUARTERLY BY

THE UNIVERSITY MUSEUM

PHILADELPHIA, PA.

DECEMBER, 1925

Entered as second class matter July 27, 1917, at the post office
Philadelphia, Pa., under the Act of August 24, 1912

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THE
MUSEUM JOURNAL

VOL. XVI PHILADELPHIA, DECEMBER, 1925 No. 4

THE BUILDERS' ART AT UR

THE excavations that the Joint Expedition of the University Museum and the British Museum is conducting at Ur have already let us into some of the secrets of the builders of that ancient city. The building trade, which is a very old one, has had a continuous development for not less than 6000 years, measured from the oldest foundations that already have been uncovered at Ur to the present time. It is interesting, therefore, to compare the methods of those very early masters of the trade with the newest and most up to date devices. It will be found that the differences are not always so great as might be supposed.

In taking stock of the performance of the Urites in architecture and building, certain general conditions come at once under observation. One of these is the advanced state of ruin that has overtaken all the buildings and the very incomplete nature of the architectural detail presented to the eye in the excavations. Another is the universal use of bricks for building. Stone is almost entirely absent even in the greatest buildings, for the reason that no suitable stone occurs in the formation of the Mesopotamian plain. The architectural remains of Mesopotamia therefore have an effect different from those of Egypt, Syria, Palestine and Persia, where stone for building purposes was abundant. This difference also, in part, explains the more advanced ruin in which the Mesopotamian buildings are found and in general the more complete obliteration of architectural outlines. These outlines have in large measure to be restored by the excavators from observations made among the ruins and the rubbish in which the buildings are involved. Brick does not last or resist the action of the elements so well as the harder stones. At Ur there is little left of the buildings except the rubbish heaps in which the foundations are found. These foundations as

they emerge in the excavations afford the plan on which reconstructions may be developed or at least attempted. The actual structures remaining in position can be illustrated by photographs, and as these structural remnants contain many lessons concerning the builders' trade 5000 years and more ago, we reproduce here a few of the photographs made at Ur by the Joint Expedition, together with a reconstruction of the Ziggurat drawn by Mr. Newton, the architect of the Expedition in 1923. For further information the reader is referred to the Reports of Major C. Leonard Woolley, Director of the Joint Expedition, printed in earlier issues of the MUSEUM JOURNAL and in the ANTIQUARIES JOURNAL.

It will be seen that many structural details are entirely wanting in the photographs and these illustrations leave us in entire ignorance as to some of the methods resorted to by the builders. Sometimes, however, these details and these methods though apparently absent and unrevealed in the remaining structures may be inferred with a high degree of probability or deduced from evidence inherent in the workmanship or arrived at by observation of the débris or restored by imagination out of suggestions offered by the general condition of things and their fitness, with the help of translated texts. Within a certain margin the results obtained are capable of demonstration even in small details; outside of that margin there may be sometimes a space where conjecture plays a part. To give an example; in the very early temple of the Goddess of Creation excavated outside the walls of Ur in a small suburb of the city called Tell-el-Obeid, a building in which the destruction was very complete, there were found in what had been the interior of the temple certain sections of long copper casings, square in cross section. The inference was that the ceiling had been supported by wooden beams encased in copper. This is not to be regarded as mere guess work. Some of the ancient texts that have been translated and that describe architectural performances of builders mention beams or other woodwork overlaid with copper, silver or gold. Not to recognize the copper casings found in the temple just mentioned as clear evidence of the methods employed in the construction of the ceiling would amount to a lapse of intelligence. A great deal of the excavator's work depends on observations upon conditions much more obscure and difficult than this. In this article nothing is presented in the way of restoration or reconstruction except the drawing of the restored Ziggurat prepared by the late Mr. E. F. Newton who

was architect on the Joint Expedition during 1923–1924. It is rather the purpose of this article to present by means of photographs the actual situation that arises in the excavations and some of the problems that present themselves to the members of the Expedition that is engaged in digging up the City of Ur. To Dr. Legrain, no less than to Major Woolley, we are indebted for our information, though these scholars conducting the work at Ur are not to be held responsible for such observations as are made in this article, or for inferences drawn from their scholarly labours.

The photograph opposite shows a condition that presents itself when the rubbish is cleared away, walls and floors of different periods are exposed. Everything is of brick, the usual size being about 12″ x 12″ x 3″ or 14″ x 14″ x 4″ or 12″ x 6″ x 3″. The sizes vary considerably. Square bricks occur oftener than the oblong form.

The different structures and periods of construction shown in this photograph are as follows.

A. The wall sustaining the platform on which the Ziggurat was raised; built by Ur-Engur about 2600 B. C.

B. A later wall of the same enclosing the former; built by one of the Larsa Kings 2000 B. C.

C. A still later wall of the same enclosing the former two and built by Kuri-galzu about 1600 B. C.

D. A pavement laid down by Sinbalatsu-ikbi, about 650 B. C.

A
D
B
C

In the example opposite may be seen how the construction work of widely separated periods becomes consolidated and how involved are the problems that confront the excavators.

Special features that come within the view shown in this photograph are walls and floors and a structure that is common to architectural methods at Ur and other Mesopotamian cities, namely a hinge box forming the characteristic feature of a doorway. The hinge box is a strong receptacle built of bricks and enclosing a heavy block of hard stone. On the upper central surface of this stone is a large socket and on a part of the surrounding surface a panel of inscription.

The photograph shows a space within the Hall of Justice (E-dublal-mah).

A. Brickwork of the Second Dynasty about 3000 B. C.
B. A front wall built by Bur-Sin about 2200 B. C.
C. Hinge Box of Bur-Sin 2200 B. C.
D. A front wall built by Ishme-Dagan about 2000 B. C.
E. A floor laid by Ishme-Dagan about 2000 B. C.
F. A floor laid by Kuri-galzu 1600 B. C.
G. A floor laid by Nabonidus 550 B. C.

G
F
E
D
C
A
B

A brick altar in the temple of Ningal, the Moon God's wife. One part of the structure, as can be plainly seen, is older than the other. The smaller and older altar was enlarged by Kuri-galzu about 1600 B. C. The bricks of the later construction rest against and upon those of the earlier structure. It will be understood that structural work of this kind would be covered with some thin material such as gold, silver, copper, bronze, mosaic or woodwork.

A regular feature observed in many buildings and corresponding to different periods at Ur is the drainage. The drain here shown is in the temple of Ningal, the wife of the Moon God. It is lined with bricks and passes beneath the floors and beneath the walls. The period is that of Sinbalatsu-ikbi, 650 B. C. Such drains served to carry off the sewage from the interiors of the buildings. It was conducted into the desert or else emptied into vertical drains that let the drainage down to a depth in the sandy plain where Nature took care of it and where it was rapidly absorbed.

The photograph illustrates an interesting phase of the excavators' work at Ur. The object in the foreground is a clay cone shown in situ as found beneath the floor of the temple of Ningal. Its surface is covered with writing and it was placed in its position by one of the later builders who restored the edifice, to commemorate and record his interest in the temple and his inauguration of the work of rebuilding. This represents a practice resorted to by all of the kings who indulged in building operations, to associate their names with their buildings by means of those inscribed cones hidden in the structures that they raised. The object itself, cone shaped or wedge shaped, presumably symbolizes the art of writing or the cuneiform character. Magic was probably one of the associated ideas.

A storeroom in the temple of Ningal. The circular foundation formed the bottom of a bin for the storage of grain or some other provision or supplies. Period of Kuri-galzu, about 1600 B. C.

The disklike floor is made of burnt brick firmly imbedded in bitumen. The sides of the cylindrical bin were constructed of the same materials. In the case illustrated the sides had disappeared, the bricks being used perhaps by some later builder. In other storerooms parts of the walls of the bins remained in position, giving the clue to their construction and function.

A narrow street paved with bricks. It is very much like the narrow, irregular streets in any Oriental city of the present day, such as Bagdad or Damascus or Cairo, except that it is infinitely better paved. The brick foundations on either side of this street show the general condition of the buildings at Ur after excavation. Sometimes even less of the walls remain, and often nothing but traces of the foundations. The large building in the distant part of the picture is rather unusual in the amount of construction that remains standing.

A street leading to the temple of Ningal, wife of the Moon God, was labeled by the excavators Ningal Street. In this view of Ningal Street is seen what is left of the Bazaars that lined one side of it. The time is that of Kurzi-galzu about 1600 B. C.

This and the other pictures show the appearance of things immediately after excavation, when brick pavements have been swept clean. Before excavation nothing was visible but sand. It will not be long before these cleared spaces will again be covered by the drifting sand.

The collapsed sections of a vertical drain found beneath the floor of a room in the temple of the Moon God. Date about 2000 B. C. The sections of pipe are made of clay burnt hard. Better preserved examples will be seen in other photographs, and different systems for joining the sections have been observed. These vertical drains served to carry off the surface water from the pavements and gutters or else to receive the interior drainage of the houses and temples and conduct it to a depth sufficient to dispose of it effectively.

A room in the Hall of Justice. Under the brick floor where it has been removed are seen the upper sections of vertical drain pipes of burnt pottery. In one of the bricks is seen the opening to another drain. In these examples the sewage from an interior went directly into the vertical drains from sinks or catch basins. The function of the room may have been that of a wash room or lavatory.

In the south wing of the Hall of Justice this large pottery drain came to light beneath the pavement. It is made of cylindrical sections of uniform diameter and composed of burnt clay, placed in a vertical position one upon another. This example illustrates a familiar type of drain, in which the sections are simply brought into contact with each other. How the joints were sealed is not altogether clear but it is probable that bitumen would be used in the interiors of the drains for that purpose. This substance was very familiar to the builders and much used by them in the construction of walls and pavements. They would naturally recognize its suitability as a lining for drains.

A floor laid by Sinbalatsu-ikbi about 650 B. C. It is made of unstamped bricks, flat on one side and convex on the other. This type of brick was peculiar to certain periods as has been proved in numerous ways. It thus becomes one of the means of determining the age of a structure in which it occurs.

This photograph illustrates also how completely the desert has encroached on the City and how it lies in wait at its gates to swallow it up again almost as soon as the excavators shall have left.

A pavement laid down by Sinbalatsu-ikbi about 650 B. C. of plano-convex brick. The end of a pottery drain appears at the break in the pavement. This form of drain seems to have been improvised from a certain form of tall pottery jars. By having the bottoms knocked out and being brought together so that the narrow neck of one fitted into the bottom of the one next below, a series of these jars were made to form a very practical drain.

The brick wall of the Sanctuary in the Hall of Justice was found to be pierced by a doorway with a round arch. The structure belongs to the period of Kuri-galzu about 1600 B. C. The round arch would therefore appear to have been known as early in history as that date would indicate. How frequent was its use cannot be decided because so few buildings have so much of their doorways left for observation.

A storeroom in the temple of Ningal showing an earthenware jar in position as found in the excavations. Period of King Kurigalzu, about 1600 B. C. Such a storeroom would probably be for oil or wine, kept in jars. A storeroom of a different type for keeping dry stores has been shown already. Each temple, palace or dwelling had its own storeroom and large deposits were kept in connection with the government offices.

A kitchen with floor of bricks and some of the stone utensils in the house of the high priestess. The stones are for grinding and are of a hard variety. All stone had to be imported from some neighbouring country such as Persia because the plain affords nothing of the kind.

The Hall of Justice is now roofless and its walls are reduced in height by the action of the elements. Different periods of building, rebuilding or restoration can be traced throughout its structure. The arched doorway belongs to the period of Kuri-galzu about 1600 B. C. The recessed appearance of the walls, giving the effect of a series of stout piers or buttresses of brick is a familiar feature of construction at Ur though by no means a general one.

The platform wall of the Ziggurat. The inner of the two visible walls, still intact, was built by the Kings of Larsa about 2000 B. C. The outer broken wall that rests upon the inner was the work of Kuri-galzu about 1600 B. C. The forms and stamps upon the bricks serve to identify the period and the names of the builders, who in succession, enlarged, strengthened, or restored the platform wall.

In the background is seen the Ziggurat and at the left a corner of the Hall of Justice. Many different periods of construction are represented in this picture. The Ziggurat is about 2600 B. C. The walls in the foreground about 2000 B. C., the Hall of Justice at the left—1600 B. C. and the pavement in the immediate foreground 650 B. C. The Arabs standing about are the workmen employed in the excavations. They are recruited from the Bedouin tribes of the neighbouring desert.

A general view of the excavations at Ur. All the ground seen in the picture has been cleared. Before excavation nothing was seen but sandcovered mounds. The picture is made from the Temple of the Moon God looking toward the Ziggurat.

In the fort of Warad-Sin were found for the first time inscribed cones remaining in position. The class of object had already been known in many examples but the manner in which they had been used had not been known till these cones of Warad-Sin were found in situ in the core of the walls of the fort that he built. This purpose would appear to have been partly magical since they may be supposed to represent or symbolize the art of writing by means of the cone shaped or wedge shaped signs on clay. They were also commemorative because the writings on the surface of the cones relate to the reigning king and his works, especially his interest in the building with which the cones are associated.

To the northwest of the Ziggurat the excavations revealed a fortress built by King Warad-Sin about 2060 B. C. Embedded in the walls of this fort were found a number of the usual clay cones that still remained in their positions and contained the inscriptions of Warad-Sin, enabling the excavators to identify the name of the builder of the fort and to fix its date. Three of these cones are seen in the lower part of the picture.

Three of the inscribed clay cones of Warad-Sin found in the core of the walls of the fort that he built at Ur; 2060 B. C. Many of these cones have been found, varying in size from five to ten inches in length. They were commonly used by rulers or their builders to place in the walls or foundations of their buildings to associate their names with their work presumably for the information of posterity and perhaps in conformity with some custom originally embodying ideas of magic.

2794
2797

The south wing of the Hall of Justice looking across the court-yard. In the picture are seen labels attached by the excavators to different features after identification, these marked features represent different periods of building, determined by one or more of the methods that have been indicated in the preceding pages. The picture shows very well the varying stages of decay that at present enwraps the city. The building in the distance is one of the best preserved at Ur. From that condition there is a gradation of decay till the very traces of the foundations are effaced.

The East Wing of the Hall of Justice after excavation. The cross marks the position of the room in which many inscribed tablets were found. A few of these tablets will be shown in the sequel. They relate to various matters and are in varying states of preservation. Many of them are unburnt and when found are sometimes hard to distinguish from the substance in which they are embedded. The room was presumably a part of the archives of the city.

One of the winding passages in the Hall of Justice. This building which was one of the best preserved structures yet excavated at Ur was also one of the most elaborate and complex. It had many rooms, halls and passages connecting with each other. All of the walls were thick and substantial but none of the rooms would be considered large today. This may have been due to their size being limited by the technical difficulties of constructing roofs and ceilings over wide spaces. The circular arch was sometimes used in doorways but whether or not the circular vault was ever employed we do not know.

A courtyard in the Hall of Justice and the processional way leading from it, after excavation. The name of this complex building, covering a large area and enclosing many passages, rooms, closed halls and open courts, was E-dublal-mah meaning the Place of the Law or Justice. It was the Department of Justice in the Government of Ur. It was where the Judges sat and read the law and made decisions and pronounced sentence. It also served many other uses connected with the Administration of Justice.

The Hall of Justice at Ur after excavation. Date 1600 B. C. The terraced construction or storeys by receding stages is a familiar feature of all ancient cities of Mesopotamia. Its most familiar aspect appears in the Ziggurat. It, or something like it, was known also in the Hanging Gardens of Babylon, and in this example it is seen in the design of a large building for official uses. The design was a matter of long experience from which much had been learned. One of the lessons that would be learned would be that a building in receding stages attained great solidity and strength and could be raised to a greater height than one with walls in the same vertical plane.

A courtyard in the Hall of Justice. The spaciousness of precincts of this important and complex building is well illustrated in this picture. Though many of the enclosed rooms were small, the spreading ranges and the broad open courtyards, beautifully paved with brick, gave an effect of space and must have achieved no small degree of grandeur.

A gatehouse or guardroom in the Ningal Street entrance to the Hall of Justice after excavation. A close inspection of the brickwork in many buildings of different periods reveals the fact that the bricklayers in general were careful to break joints exactly and methodically in every course, but sometimes it will be found that the workmen were not so particular and laid two or more courses with the joints together. Floors and pavements were always laid with the joints between the bricks forming continuous lines in both directions.

The southern part of the Hall of Justice after excavation. The members of the Joint Expedition have labeled the different features for their own guidance, as each was brought to light and identified by them according to the methods already described.

The members of the Joint Expedition of the University Museum and the British Museum at Ur, beside the Hall of Justice, season 1924–25. The amount of sand and débris that has to be removed in the clearance of such a building may be realized from the fact that none of these walls were visible when the excavation began.

A room in the Hall of Justice called the Sanctuary. At the entrance are two brick steps with rounded ends. Floors in this complex building were on different levels requiring sometimes the introduction of steps at the entrances. In this instance the two steps are rounded at the ends, are of different lengths and both exceed in length the width of the doorway.

This piece of brick wall in the Hall of Justice shows plainly the King's stamp on some of the bricks. The stamp is that of Bur-Sin who reigned about 2200 B. C. Sometimes the stamp was placed on one side of the brick and sometimes on an edge. In the latter case the stamp might show if the stamped edge happened to be in the face of the wall. In the former case the stamp would never show. Indeed it would appear that the stamps were not intended to show in the construction, for it is probable that such brickwork was covered with plaster.

A large clay tablet with many lines of writing found in a room of the Hall of Justice. The contents of the tablet consist of a record, for a definite period of time, of the receipts of wool in the government offices that stood within the temple enclosure and were a part of the Moon God's establishment. Many tablets referring to the work of administration were found in the same chamber which would appear to have been a record office or filing room connected with the offices of administration of the Moon God's government. A similar tablet found in the same place gives the roll of 98 women and 63 children employed in a factory run by the Temple or a subcontractor. It gives the weight of wool issued to each woman and the quantity of cloth turned out by each, recorded by weight, measurement and quality, with an allowance for wastage of wool in the weaving. Other tablets specify the rations issued to each woman and child, the allowance varying with the age of the worker—an old woman receiving the same as a child. Deaths are recorded together with stoppage of rations and every detail is minutely tabulated.

A large clay tablet found in many pieces. It measures 12 inches by 12 inches and is written closely on both sides. It is an example of the administration documents found in the government offices of the Moon God within the Temple enclosure.

A group of inscribed clay tablets found in a room in the Hall of Justice. All of these tablets after being recovered are baked in an improvised furnace at the house of the Joint Expedition, to prevent them from disintegration. They can then be cleaned without injury. The tablets shown have been subjected to both these processes.

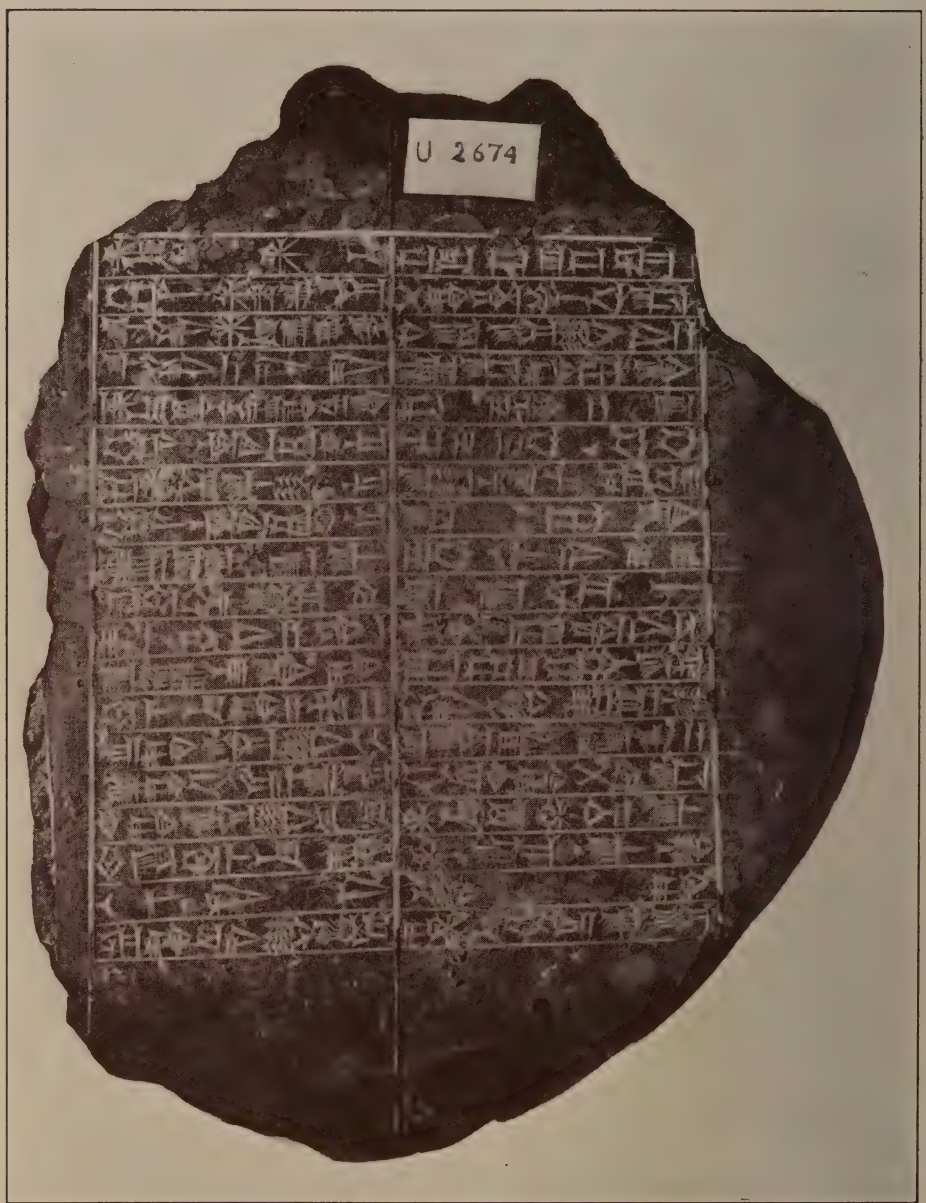
The larger tablet gives details of information about the management of the factory connected with the Government of Ur. It was within the sacred enclosure of the Temple and came within the Administration of the City and the Temple. A number of tablets have been found relating to this cloth factory. It employed 98 women and 63 children at its looms and the tablet here shown is the record for one month of the rations issued to these women and children, for all of which they where charged, each having a separate account.

The next largest tablet on the illustration opposite is a receipt for gold and silver paid into the government Treasury. The next is a receipt for the sheepskins also paid into the Treasury and the smallest is likewise a receipt.

It is clear from such records that the building trade at Ur was developed along many lines corresponding to many uses. There were temples, palaces, office buildings, treasuries, libraries, dwellings and many other classes of buildings.

The position and function of the door socket in the architectural and ceremonial life of Ur is explained on page 222. The door sockets are usually made of diorite, a very hard, fine grained black stone. The inscription in each case gives the name of the king in whose reign the building was erected, together with mention of the principal events with which his reign is connected. Sometimes also there are lines of magic, a curse or an incantation. A door socket of Ur-Engur, for instance, found in the Hall of Justice or Place of Judgment, recording the name and works of King Ur-Engur, lays a curse in the name of the Moon God and his wife on anyone who shall remove the stone. It reminds one of Shakespeare's lines on his tomb. Some of the door sockets are shown on the following pages.

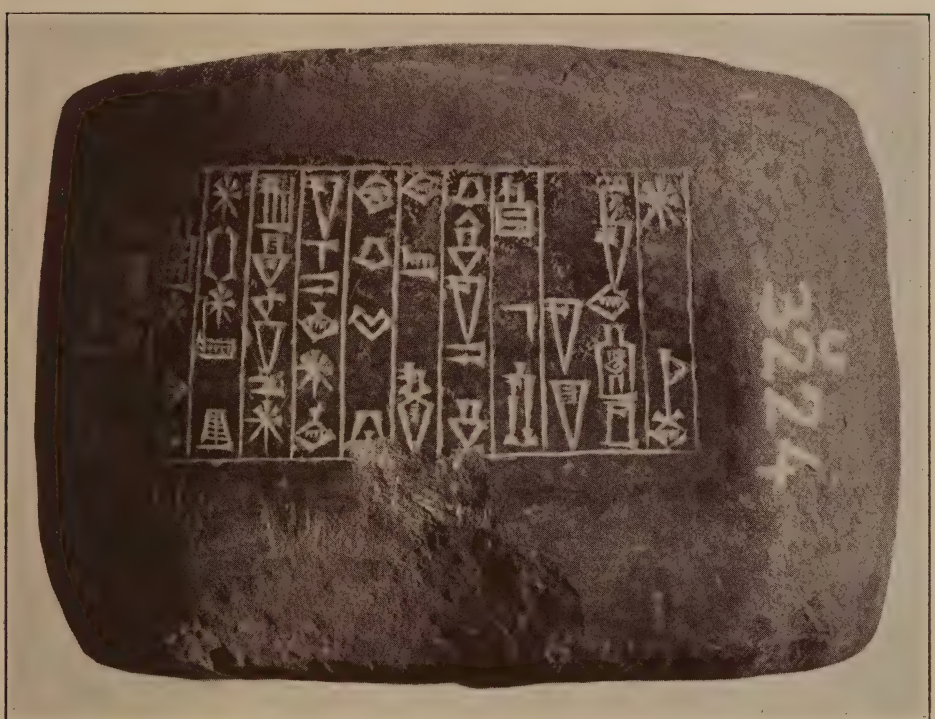
Door Socket of Gimil-Sin about 2000 B. C. The inscription reads: To Gimil-Sin beloved of [the God] Enlil, the King whom Enlil has chosen as the delight of his heart; the mighty ruler, King of Ur, King of the four quarters of the world, his god, Lugal-ma-gurri, commandant of the fortress, vice regent of Ur, his servant, has built this beloved temple.



Green feldspar Door Socket of Sinbalatsu-ikbi 650 B. C. Time of Ashurbanapal. Inscription on the under side recording the restoration of the Gateway leading to the Ziggurat. This gate is stated to have been in the middle of the Terrace of the Temenos on the processional way piercing the massive walls. The gate itself is described as having been made of boxwood, studded with bronze nails. Its knob was of gold and its lock of silver. It was bound with plates of silverplated bronze.

Door Socket of Bur-Sin, about 2200 B. C. The inscription contains a dedication by this King, of the temple that he built to Ningal consort of the Moon God. The door socket was found in the ruins of the house of this goddess.

Door Socket of Ur-Engur—2600 B. C. This example is unique in that it still retains in its socket, the bronze shoe of the wooden pivot in which the door was hung. Both the bronze shoe and the stone socket contain the same inscription: Ur-Engur, King of Ur, has built the house of Nannar [The Moon God].



Door Socket of Bur-Sin, about 2200 B. C. On this stone are fifty two lines of inscription describing the building of the Hall of Justice for Nannar [The Moon God].

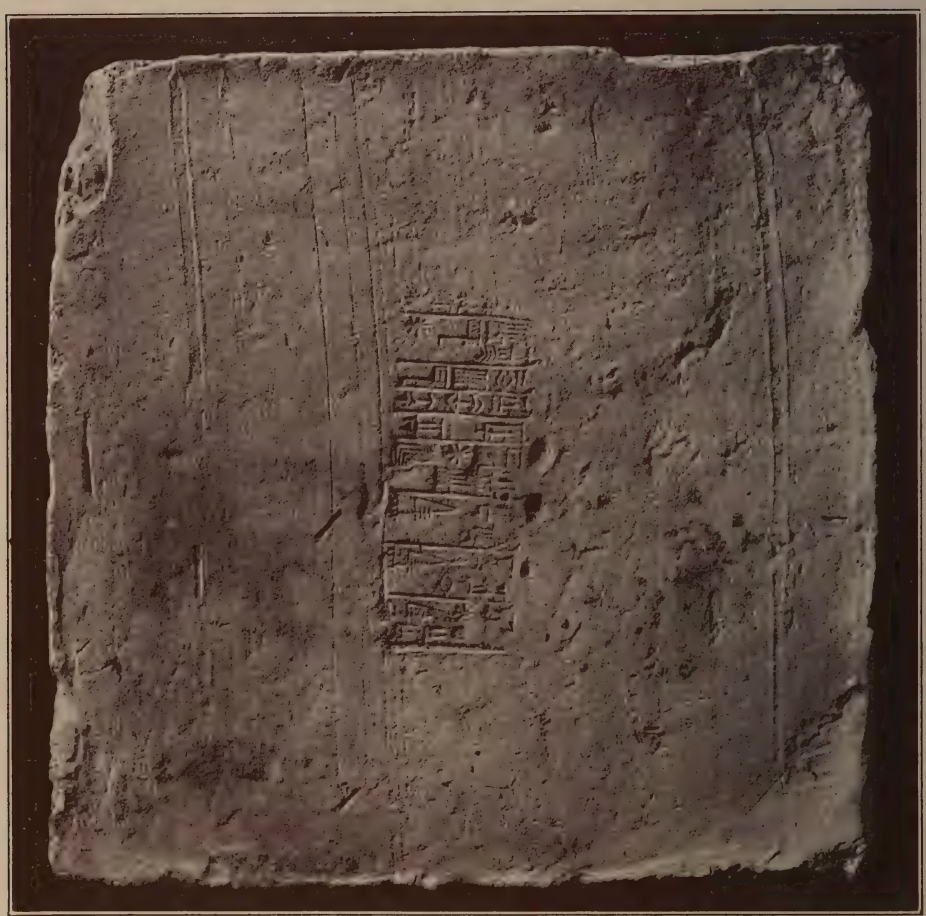
Door Socket of Kuri-galzu, 1600 B. C., in situ. The block of diorite with its inscription is encased in a box built of brick. The socket measures about 5 inches in diameter, indicating a thick and heavy door.

One of the most reliable ways that the excavator has at his command for identifying any building, pavement or wall is by means of the stamps on the bricks. On the following pages are shown some of these stamped bricks. Bricks varied somewhat in size and shape even during the same reign. Sometimes they were oblong but usually they were square. Sometimes they were burnt and sometimes only sun dried.

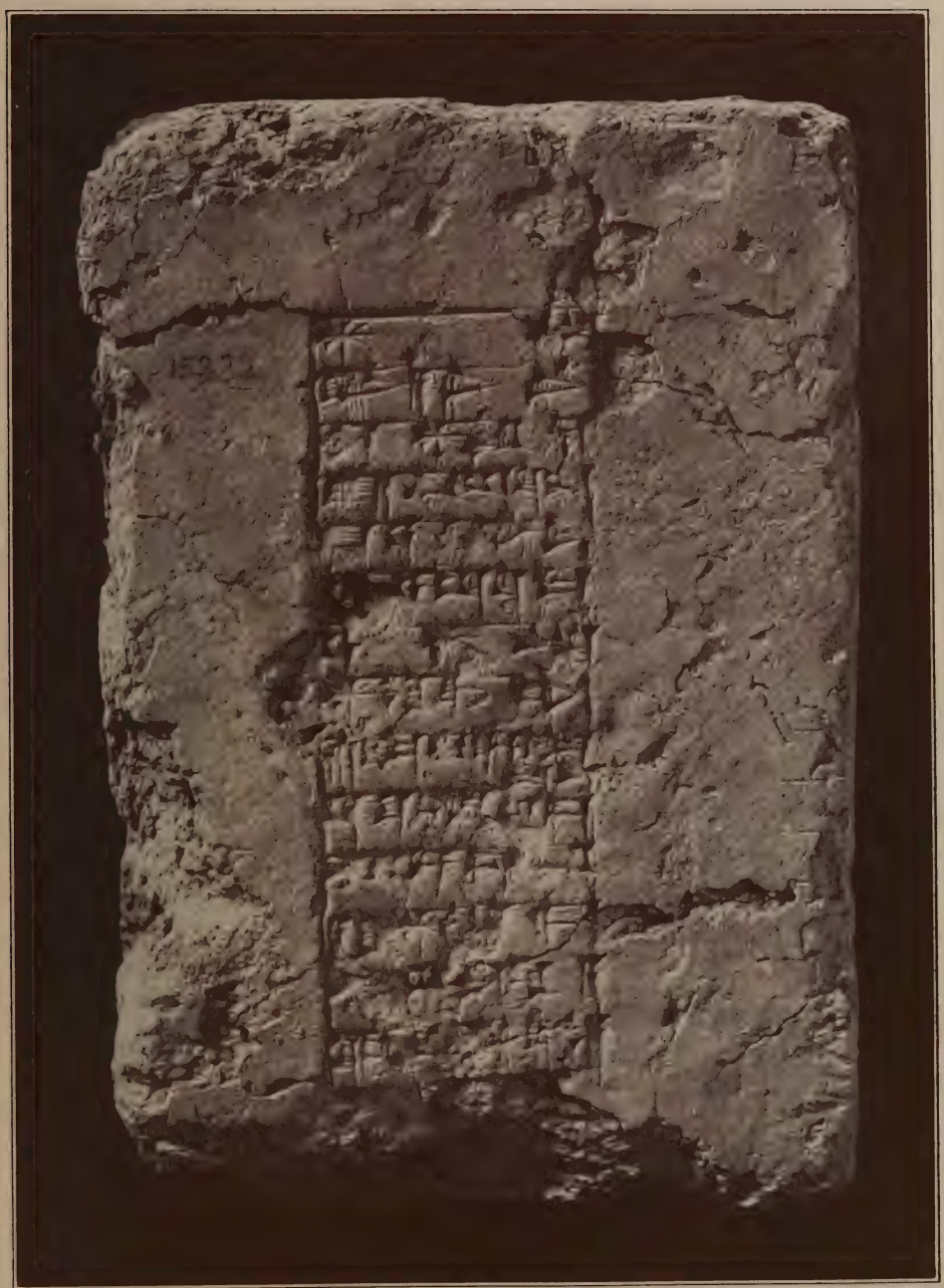
The brick shown opposite bears the stamp of Shulgi, King of Ur, 2260 B. C. At the left side is seen a mass of adhering bitumen. Bitumen, found in lakes in the desert that are still a feature of the country, was used in ancient times for mortar in brick construction. "They had brick for stone, and slime [i. e., bitumen] had they for morter."—GENESIS 11:3.

A brick of Shulgi, King of Ur, about 2260 B. C. The substance adhering at the left is bitumen, in which the bricks were laid.

Size, 11 inches by 13 inches by 4 inches thick.



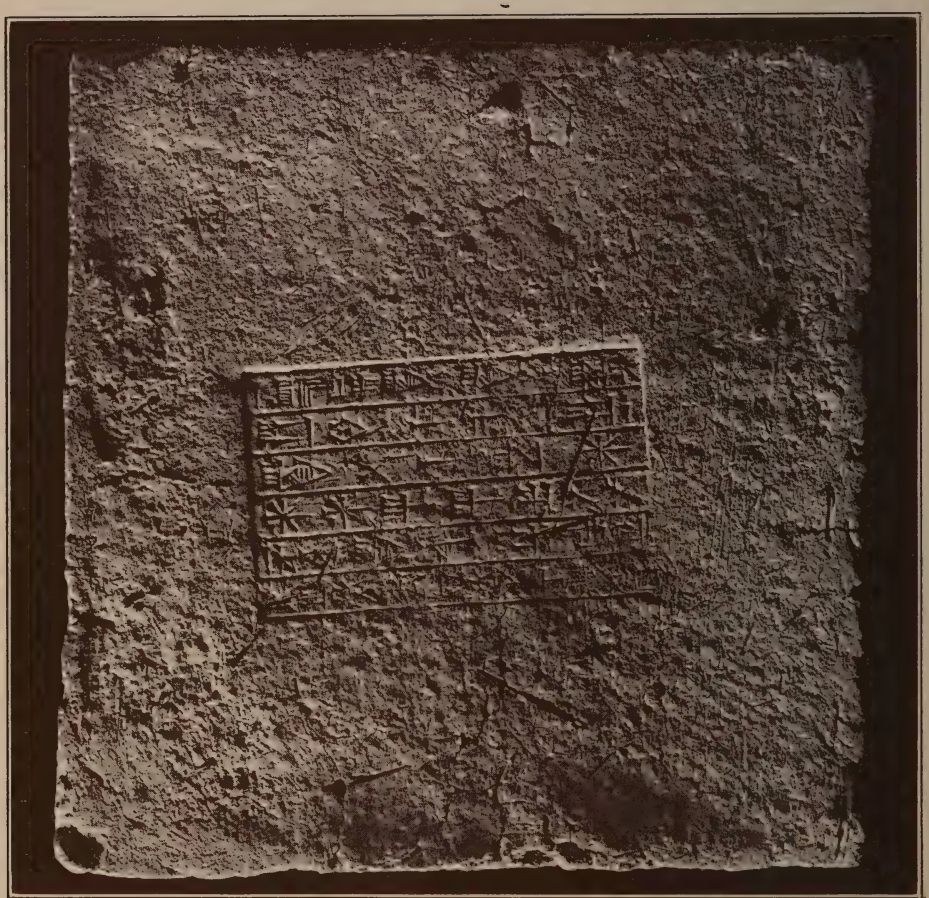
Brick of Bur-Sin, about 2200 B. C.
Size, 13 inches square by 3 inches thick.



Brick of Warad-Sin, about 2060 B. C.
Size, 10 inches by 7 inches by 3 inches thick.

Brick of Sin-iddim-am, 1800 B. C.

A brick of Kurigalzu about 1600 B. C.
Size, 11 inches square by 2 inches thick.



A brick of Cyrus the Great, 530 B. C.
Size, 13 inches square and 3 inches thick.

DISCOVERY OF THE TEMPLE OF ASHTAROTH

REPORT OF THE EXPEDITION TO PALESTINE

By Alan Rowe, Field Director

> And it came to pass on the morrow, when the Philistines came to strip the slain, that they found Saul and his three sons fallen in mount Gilboa. And they cut off his head, and stripped off his armour, and sent into the land of the Philistines round about, to publish it in the house of their idols, and among the people. And they put his armour in the house of Ashtaroth; and they fastened his body to the wall of Beth-shan.—I Samuel 31:8–10.

THE excavations of the University Museum at Beisan, Palestine, were resumed on the first of September last and the season's work has already produced very important results, throwing much new light on the history of the locality as well as on the religion of the Philistines in whose possession it remained for so long. The discoveries that I have now the honor to report concern the whole history of Palestine.

Beisan is the biblical Beth-Shan, and lies at the eastern end of the Valley of Jezreel overlooking the Valley of the Jordan. In Hellenistic and Roman times it was known as Scythopolis or Nysa, and was the chief city of the famous Decapolis or league of ten cities, all of which, with the exception of Scythopolis, were on the east side of the river Jordan. The nine other cities were Pella, Dion, Gerasa, Philadelphia, Gardara, Raphana, Kanatha, Hippos and Damascus. Scythopolis and Pella, which almost face one another across the Jordan, are both referred to in an interesting hieroglyphic inscription which we found at Beth-Shan in 1923. This inscription occurs on a stela set up there by King Seti I of Egypt, and is dated in the first year of his reign, that is to say in 1313 B. C.

The text describes the invasion of Eastern Palestine by the king, and states, inter alia, that the chief of Hamath had collected together many people, and had attacked Beth-Shan and allied himself with the people of Pella. He also had laid siege to the city of Rehob. The king thereupon divided his army and sent the division of Amen to the city of Hamath, the division of Ra to the city of Beth-Shan, and the division of Sutekh to the city of Yenoam, and overthrew the enemy in the space of a day. Rehob and Hamath have recently

been identified with certain mounds just to the south of Beth-Shan. The position of Yenoam is as yet uncertain.

Many other references to Beth-Shan occur in old Egyptian literature. It is also mentioned in one of the letters of the famous Tell el-Amarna cuneiform tablets, of the fourteenth century B. C., found in Egypt and containing the official correspondence between king Amenhetep III and Amenhetep IV of Egypt and their tributary kings and governors, of Western Asia. In the letter in question, Abdi-Khiba, one of these viceroys, writes as follows to his master the king of Egypt:

"Tagi has got the land of Gath-Carmel, and the men of Gath are in occupation of Beth-Shan."

The derivation of the name Beth-Shan, or "House of Shan," is uncertain, but it is quite possible that Shan was the name of some local Canaanite deity. Variant passages in the Old Testament give the name of the town as Beth-Sha'an, which may be rendered "House of Security."

The high tell or mound which we are excavating consists of a series of superimposed cities. The excavations of the previous seasons had already cleared away from its summit the Arabic and Byzantine levels, and had revealed beneath them part of a large Hellenistic temple as well as the brick walls of a great Egyptian fort. This season's work has cleared the whole of the temple, which is about 120 feet in length by about 71 feet in width over all, and is similar in plan to the Roman temple of Bacchus at Baalbek, Syria. It had a row of large columns all round it, with Attic bases and Corinthian capitals; the entrance was at the east. The foundations of the temple had cut right through the walls of the old Egyptian fort, and in carrying out their work the builders must have destroyed a certain quantity of valuable Egyptian historical material, the amount of which can almost be gauged by the important objects which are known to have escaped destruction.

The fort now being excavated was doubtless built by King Seti I, and we may be sure that the king, in accordance with the usual Egyptian practice, bestowed upon it some picturesque name, but this has not yet come to light. It was held by the Pharaohs until the time of Rameses III of the Twentieth Dynasty, who reigned from 1198 to 1167 B. C., when the latter monarch came to Beth-Shan, and erected there a statue of himself which was found in our last season's excavations. After that a group of peoples coming from Crete and

the south coasts of Anatolia, generally known as the Philistines, entered Palestine and occupied the fort until they were driven out by King David about 1000 B. C. Some twenty years before the latter date, the Philistines who had defeated King Saul of Israel upon the neighbouring Mount Gilboa, hung his body to the walls of Beth-Shan and placed his armour in the house of the goddess Ashtaroth. This very house of Ashtaroth has been found this season and will be described later on.

A considerable number of important Egyptian objects have been brought to light this year, the first one in order of finding being the XIXth Dynasty stele of an official or private individual, whose name seems to be Amen-em-Apt, and who is shown on the monument in a kneeling position with both hands raised in adoration. The accompanying texts mention the Egyptian gods Ra-Harmachis-Tem-Khepera; Thoth, "lord of divine words"; Shu; Tefnut; Osiris, "at the head of the west, the great god, the king of eternity"; and Ra the sun god. Amen-em-Apt prays that he may have a happy burial in the heights of his town, and that his soul may come forth as it desires, without being shut up in the tomb, and also that he may see Ra, and the gods who are adoring the sun god, as his solar barque traverses the heavens. The name of Amen-em-Apt recalls at once to one's mind a *maher*, or trained scribe, of that name referred to in the famous Anastasi Papyrus of the XIXth Dynasty (in the time of Rameses II). The scribe is bantered by Hori, another scribe, for his incompetence, and is spoken to by Hori as follows: "Pray, teach me about K-Y-N (Kanah?), Rehob, Beth-Shan and T-r-k-el. The stream of the Jordan, how is it crossed? Cause me to know the crossing over to Megiddo." Near this monument, but in another room, was found the missing fragment of the stele of Seti I discovered the last season at Beisan; this fragment mentions Kharu (Palestine), a word which is met with on the famous Israel stele of King Merenptah, now in the Cairo Museum. "Israel is desolated, and his seed is no more, and Kharu has become a widow for Egypt." A few feet away from this fragment we have lately unearthed the centre portion of a XIXth Dynasty statue of a king or royal personage, very similar in style to the statute of the prince Kha-em-Wast, son of Rameses II, exhibited in the British Museum, and to a certain statue of King Merenptah in the Cairo Museum. The statue represents a man standing upright, with arms held straight down by his sides, supporting a long staff in each hand. From the

same room and from under its floor, which was made of hard clay, came a most important monument of basalt, dedicated by an Egyptian named Hesi-Nekht, who lived under the XIXth Dynasty. This monument shows a figure of the goddess Ashtaroth, who is depicted as wearing a long dress and the usual conical crown of all Syrian goddesses, with two feathers attached. She holds the *was* sceptre in her left hand and the *ankh* sign of life in her right hand. The interesting thing about the monument is the fact that, although the goddess is depicted as Ashtaroth, she is called Antit (Anaitis), which deity elsewhere is invariably shown as seated on a throne, holding a battle axe in her left hand and a shield and spear in her right hand. In front of the goddess is Hesi-Nekht, and an altar stand with a lily over it. Above her is written "Anaitis, lady of heaven, mistress of all the gods," and against the man, "May the king give an offering—Anaitas—may she give all life, strength and health, to the double of Hesi-Nekht." Recent research shows that Ashtaroth and Anaitis were merely different names for the same deity.

Very near the stele we came upon a number of baked clay objects, which were evidently connected with the cult of the goddess Ashtaroth, and which appear to throw an extremely interesting and new light upon the early religion of Palestine. These cult objects take various shapes, and examples of them have never been found before in this country. Some of them are in the form of rectangular shrines, in two stages, surmounted by a rounded top bearing the figures of birds, probably doves and ducks. In the upper stage are two windows and two doors, with the nude figure of a female, who must be Ashtaroth, standing looking out from the door on each side. She holds birds in both hands. The lower stage has a window on every side, and a snake winding up from near its base towards the goddess above. Other cult objects are in the form of circular stands with two handles near the top, and with bellshaped open bases. The top is like the rim of a jar. On the top of each handle are birds, while in the sides of the object are openings, four, or sometimes eight, in number, in whch sit other birds, towards some of which face the heads of the serpents coiled round the stand. Other stands of a similar shape have no serpents or birds on them, but possess two handles and openings. It is well known that serpents and doves were sacred to Ashtaroth. Soon after the Israelites entered Canaan, and subsequent on the death of Joshua, they appear to have worshipped Baal and Ashtaroth, a fact which is referred to in Judges

2:13. Also, "Ashtaroth the goddess of the Zidonians" was worshipped by Solomon. The room in which the stele of Ashtaroth-Anaitis was found had four solid stone drums concealed under its floor of hard clay; these must have at some time formed the bases for wooden columns. One of two things must have taken place. Either the builders (probably of the XIXth Dynasty) of the floor removed the superstructure of a slightly earlier temple, or were themselves the persons who erected the bases, which, owing to a change in plan were never used for their original purpose.

One of the most important things that we have just unearthed is a large temple which is situated on the extreme south side of the tall summit, in the Egyptian level. It is about twenty four metres long, by nineteen metres broad, with its axis running west to east. It comprises a rectangular building containing a long central hall with three circular stone bases on either side, the bases being built into brick walls. Wooden columns must have been set up on these bases. To the south of the hall are three store rooms, on the floor of one of which was discovered a peculiar pottery cylindrical shaped object with the forepart of a bull at one end, and the forepart of a lion the other end. The eastern end of the temple had been smashed away by two large reservoirs, one Byzantine and one Hellenistic, one above the other. From the temple floor level came a number of the goddesses, serpent, and bird cult objects described above. Against the centre column base on the south side of the wall was discovered a foundation deposit, consisting of a pot filled with ingots, rings, and earrings of electrum, an alloy of gold and silver, the intrinsic value of which, apart from the archæological value, must be considerable. A similar deposit, consisting of gold objects, was found against the column on the opposite side of the hall. All the available evidence shows that the temple was erected by the Egyptians to the goddess Ashtaroth, and it was, so far as we know, the only temple intact at Beth-Shan at the time the Philistines conquered and lived in the city. It is more than probable that it is none other than the "house of Ashtaroth" mentioned in I Samuel 31:10, within which was hung the armour of King Saul after his death. The account in I Chronicles 10:10 is not so precise as that in Samuel, for it merely says the armour was placed in the "house of the gods."

We can confidently refer the date of the Ashtaroth temple to the XIXth Dynasty, for its floor level is exactly on the same plane as the floor level of the rooms containing the monuments of Seti I

and Rameses II, found last season. Further than this, we actually discovered on the temple floor a very valuable serpentine cylinder seal, inscribed with the cartouche of the latter king, who reigned from 1292 to 1225 B. C. The seal shows the figure of Rameses, wearing the battle helmet, and shooting an arrow at his Semitic enemies. Facing the monarch, is the figure of the Canaanite warrior god Reshpu, who holds a scimitar in his right hand. Between the two figures is the standard of a Canaanite fort, comprising a shield pierced with three arrows and supported on a pole; at the base of this emblem are two captive bearded Canaanites. The seal is quite unusual, and the whole scene is remarkably well cut.

Upon an inscribed stone door jamb found in the temple débris, we came across the name of the commandant of the Beth-Shan fortress, doubtless in the time of Rameses II, or a little later. His name was Rameses-wesr-khepesh. Among other things he was "fortress commandant of the bowmen of the king, scribe, and steward of Pharaoh." He was the son of a man whose name is missing, but who was a royal fanbearer at the right hand of the king. Perhaps Rameses-wesr-khepesh was actually the man who built the Ashtaroth temple, of which the stone formed a part. It was found in the débris a little way inside the entrance. On the other hand, if he was not its builder, he may have been its restorer.

Underneath the XIXth Dynasty temple is another temple, which may possibly turn out to be one erected by King Thothmes III of the XVIIIth Dynasty, 1501–1447 B. C., whose scarab was found in the débris a little below the level of the upper temple, together with over a thousand beads of carnelian, gold, crystal, etc. The axis of the lower building, unlike that of the upper one, runs from south to north, and at the northern end, the only one that has so far been excavated, is an altar in a small room, which room has a flight of six steps leading up to it from the main floor of the temple. The altar is composed of a brick base supporting two large stone slabs, one of which appears to be a sacred object from some other building, for it is hollowed out on the underside, with a depression in one part of the hollow. The top of the altar is flat, and slants down from the back to the front. On the floor of the room, which was coloured a bright blue, we discovered a lifesized stone hawk, wearing the double crown of Upper and Lower Egypt, and standing on a base. The hawk is well made and was painted in a vivid manner. Under one part of the floor of the room was a gold scaraboid, and on the floor itself four

bronze straight sided pots, a stone four handled bowl, a Hyksos seal cylinder, and some strips of gold foil. Later on, we shall search for foundation deposits under the altar itself. From a room outside the XIXth Dynasty temple came a pottery cult object composed of three stages. On the uppermost stage is a figure of a seated goddess, who must be Ashtaroth. Below her, and on the second stage, are the figures of two men, one all but broken away, each with a hand on the other's head. By the side of one of the men are the feet of a bird, and under him, the head of a snake, which winds up the lowest stage. Behind the other man, and on the side of the second stage, is a figure of a lioness. What the whole scene actually represents is uncertain. Perhaps the lioness is meant to be chasing the man, who flies to the goddess for protection. But this is only a provisional hypothesis which may be modified later.

It seems certain that the part of the tell on which the two Egyptian temples were erected, the one over the ruins of the other, was the sacred part of the mound, and we may well find a Canaanite high place under the lower temple which we have provisionally dated to the XVIIIth Dynasty. Perhaps the peculiar hollowed out stone referred to above originally belonged to this high place and was used as a libation tank. The temples are the only Bronze Age buildings of their kind found in Palestine. The excavation of the lower Egyptian temple is now proceeding, but a huge amount of débris has to be removed before it can be completely cleared. Several stone column bases in situ have already been unearthed.

Beisan, October 15, 1925.

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